AID P - 5267

Subject : USSR/Engineering

Card 1/1 Pub. 107-a - 3/18

Authors : Nikolayev, K. G., Kand. of Tech. Sci. and B. A. Gololobov, Eng. (TsNIITS)

Title : Detection of possible cracks in welded joints of vessels

Periodical : Svar. proizv., 9, 9-12, S 1956

Abstract : The authors describe the methods and tests developed by the Central Scientific Research Institute of Shipbuilding Technique for determination of thickness of welded steel, number of welding travels, rigidity of welded sheets, thermal processes, initial temperature in base metal, etc. Many of these methods now are adapted in the shipbuilding industry. Two tables, 2 photos, 2 drawings, 2 graphs. 1 Russian reference.

Institution : TsNIITS (Central Scientific Research Institute of Shipbuilding Technology probable expanded translation).

Submitted : No date

L 16471-65 EWT(m)/EWA(d)/EWP(v)/EWP(t)/EWP(k)/EWP(b) Pf-4 IJW/JD/HM

ACCESSION NR AM4046251 BOOK EXPLOITATION S/

Gololobov, Boris Andreyevich; Nikolayev, Konstantin Georgiyevich B+1

Properties of welded joints of steel hulls (Svoystva svarnykh soyedineniy korpusnykh staley), Leningrad, Izd-vo "Sudostroyeniye", 1964, 236 p. illus., biblio., tables. 1,900 copies printed.

TOPIC TAGS: ship hull, weldment, carbon steel, low alloy steel

PURPOSE AND COVERAGE: The book examines the basic properties of the metal of weldments of carbon and low alloy hull steels of the pearlitic class. The effect of alloying elements, temperature, and the thickness of the base metal, welding regime, and other engineering factors on the mechanical properties of weldment metal in static and dynamic loading and on the tendency to crack formation and corrosion resistance in sea water is described. The book gives some methods of improving the properties of weldment metal. It is intended for engineers and designers working in the welding of hull steels and the development of welding materials. It also can be used by advanced students of higher educational institutions and researchers.

TABLE OF CONTENTS [abridged]:

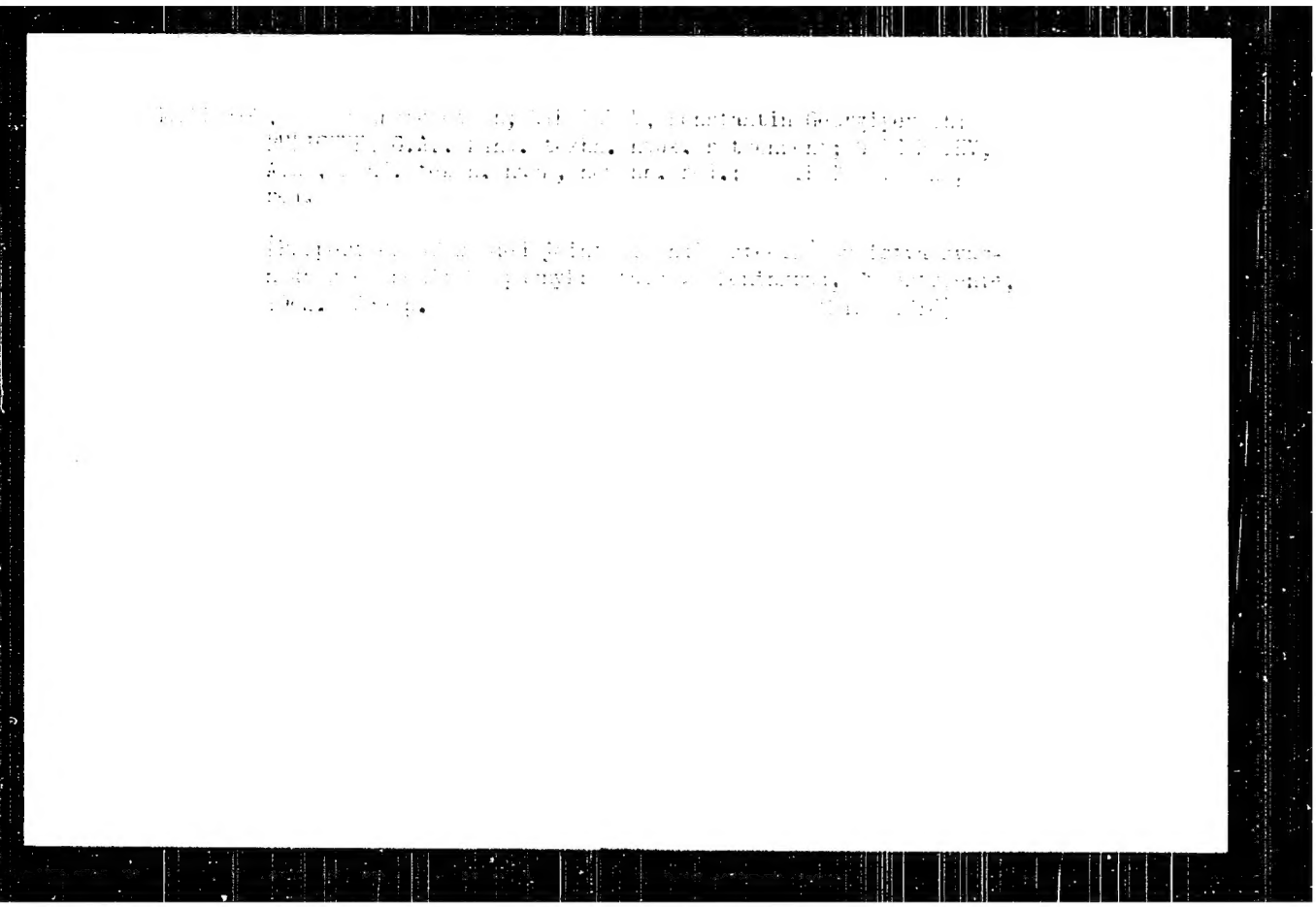
Card 1/2

L 16471-65
ACCESSION NR AM4046251

SUB CODE: MM SUBMITTED: 09Apr64 NR REF SOV: 087

OTHER: 015

Card 2/2



SOV/137-59-2-[illegible]

AUTHORS: [illegible], D.I.,
Lirrinov, B.M.

TITLE: Oxy-Acetylene Scarfing of Stainless and Heat Resistant Steels (Ognevaya zachistka nerzhaveyushchikh i zharoprochnykh staley)

PERIODICAL: Stal', 1959, Nr 2, pp 147-147 (USSR)

ABSTRACT: The possibility of scarfing of various steels with increased content of chromium and nickel was investigated. Stainless and heat resistant steels can be divided into two groups: steels in which critical transformations [illegible] hardening phase on hardening and cooling (e.g. 1Kh13, 2Kh13, EI802) and practically single phase steels (e.g. 1Kh18N9T, 1Kh18N12T, EI835). There were some fears as to the possibility of formation of cracks in steels of the first group, however it was found that cracks were not formed. These results were confirmed by subsequent results of scarfing of a large quantity of metal. When aluminum-magnesium powder is used with oxy-acetylene flame the surface of blooms of high chromium steels is covered with a layer of slag which [illegible] for checking on the quality of dressing is removed by

Card 1/5

Oxy-Acetylene Scarfing of Stainless and Heat Resistant Steels

special scraper. At present not less than one ingot per heat is cleaned with an abrasive wheel to check on the quality of scarfing. Scarfing of ingots was also tested for this purpose half of the ingots from heats were scarfed while the remaining half was mechanically dressed. It was found that the quality of the metal in rolled products from scarfed ingots and blooms was not in any way inferior to that from mechanically dressed ingots. In order to study the influence of scarfing on the structure of high chromium steels specimens cut from scarfed blooms of 1Kh13, 3Kh13, Kh9S2, Kh12, Kh5, [illegible], [illegible], 4Kh14N14V2M and Kh25N13 steels were submitted to micro-analysis. It was found that cast and hardened structures are formed in the surface layers as well as some decarburization. An increase in the [illegible] annealing of hardened layer to a depth of [illegible] in place. However, as blooms are reheated and rolled into various products with a considerable deformation the surface zone becomes so thin that changes in the surface layer of the blooms caused by scarfing can be neglected. As on scarfing with aluminium [illegible]

Card 2/5

Oxy-Acetylene Scarfing of Stainless and Heat Resistant Steels

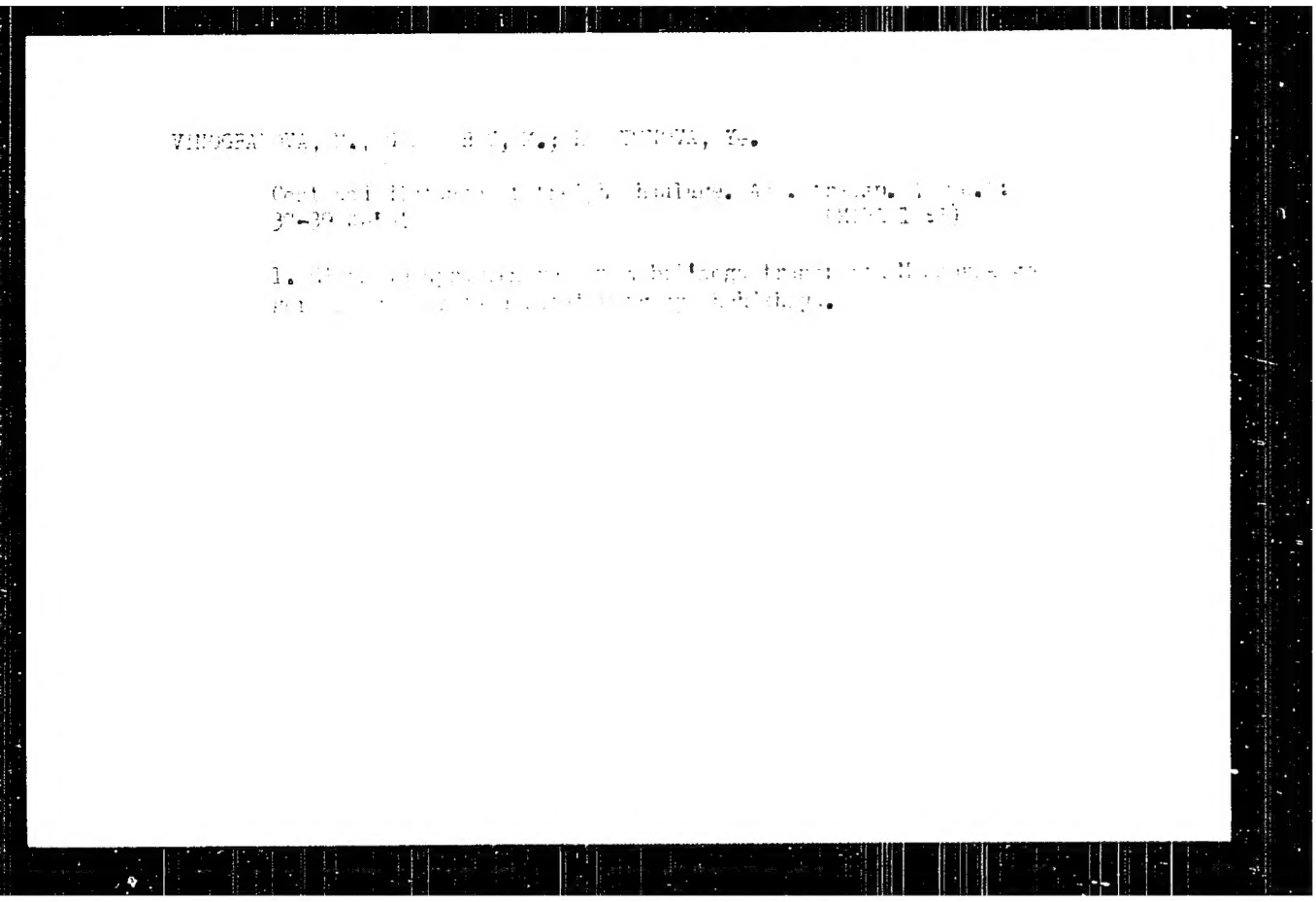
[illegible] and galloping gases are evolved. A special [illegible] with an exhaust system was designed [illegible] at present [illegible] all blooms [illegible] are treated by scarfing [illegible] both of which are [illegible]

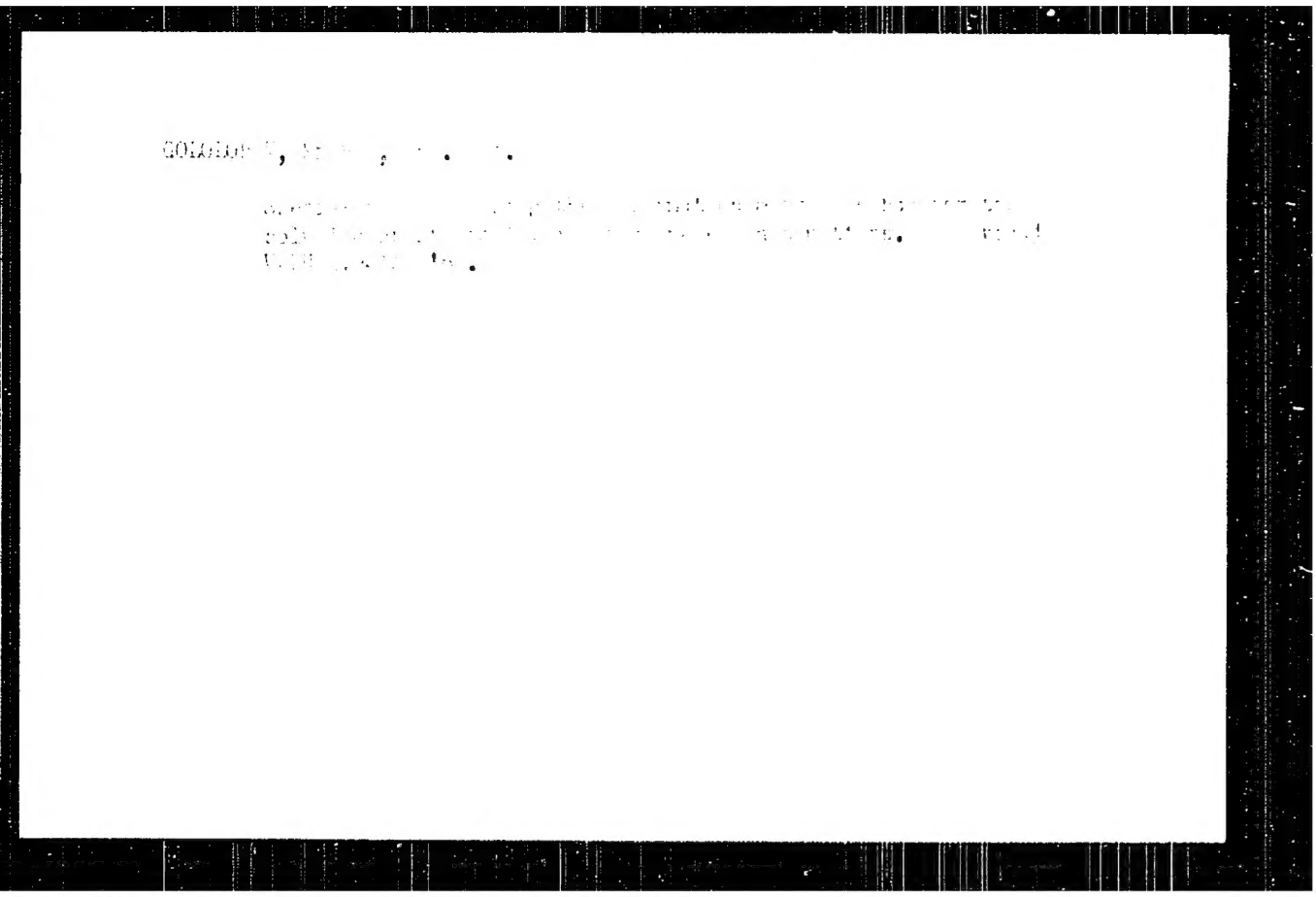
ASSOCIATION: [illegible]

Card 2/2

GOLOLOBOV, M., inz.

"An introduction to the theory of aircraft structures" by D. Williams. Reviewed by M. Gololobov. Strojirenstvi 13 no.3:239 Mr '63.





GOLOLOBOV, Michal, ing.

Application of influence coefficients of individual parts of a statically indeterminate structure in its solution by the matrix deformation method. Zpravodaj VZLU 3:3-7 '64.

GOLOLOBOV, V.G.

Separator units used in reprocessing slag dump. Biul. tekh.-ekon. inform. no.3:15 '58. (MIRA 11:6)
(Iron--Metallurgy)

AUTHOR: Gololobov, V.G., Engineer

TITLE: The Application of Statistical Analysis and Theory of Probability in the Production of Perforator Components (Primeneniye matematicheskoy statistiki i teorii veroyatnostey v proizvodstve detaley perforatorov)

PERIODICAL: Vestnik Mashinostroyeniya, 1959, Nr 2, pp 76-77 (USSR)

ABSTRACT: Using the example of a perforator ring assembly, the application of statistical analysis to dimensional chains is explained. Histograms of size deviations for each dimension of the chain have been obtained from actual measurements (Fig 2). A factor is chosen for the acceptable percentage of scrap assemblies which yields the tolerances in the dimensional chain. Practical tests have confirmed that, for example, with a scrap percentage of 0.27% the tolerances could be doubled. This has reduced the machining time by 25% on the average. There are 2 figures and 1 table.

Card 1/1

GOLOLOBOV, V.G.

Separators for iron-ore dressing. Biul.tekh.-ekon.inform. no.1:6-7 '60. (MIRA 13:5)
(Magnetic separation of ores)

GOLOLOBOV, V.G.

The 159A-SE and 54AMG-1 magnetic separators and apparatus for ore dressing. Biul.tekh.-ekon.inform no.6:4-6 '60. (MIRA 13:8)
(Magnetic separation of ores)

GOLOLOBOV, V.G.

The 171A-SE electromagnetic separator. Biul.tekh.-ekon.inform. no.[illegible]-10 '61. (MIRA 14:6)
(Magnetic separation of ores)

ZINOV'YEV, V.I., inzh.; GOLOLOBOV, V.G., inzh.; GRISHECHKIN, A.I., inzh.

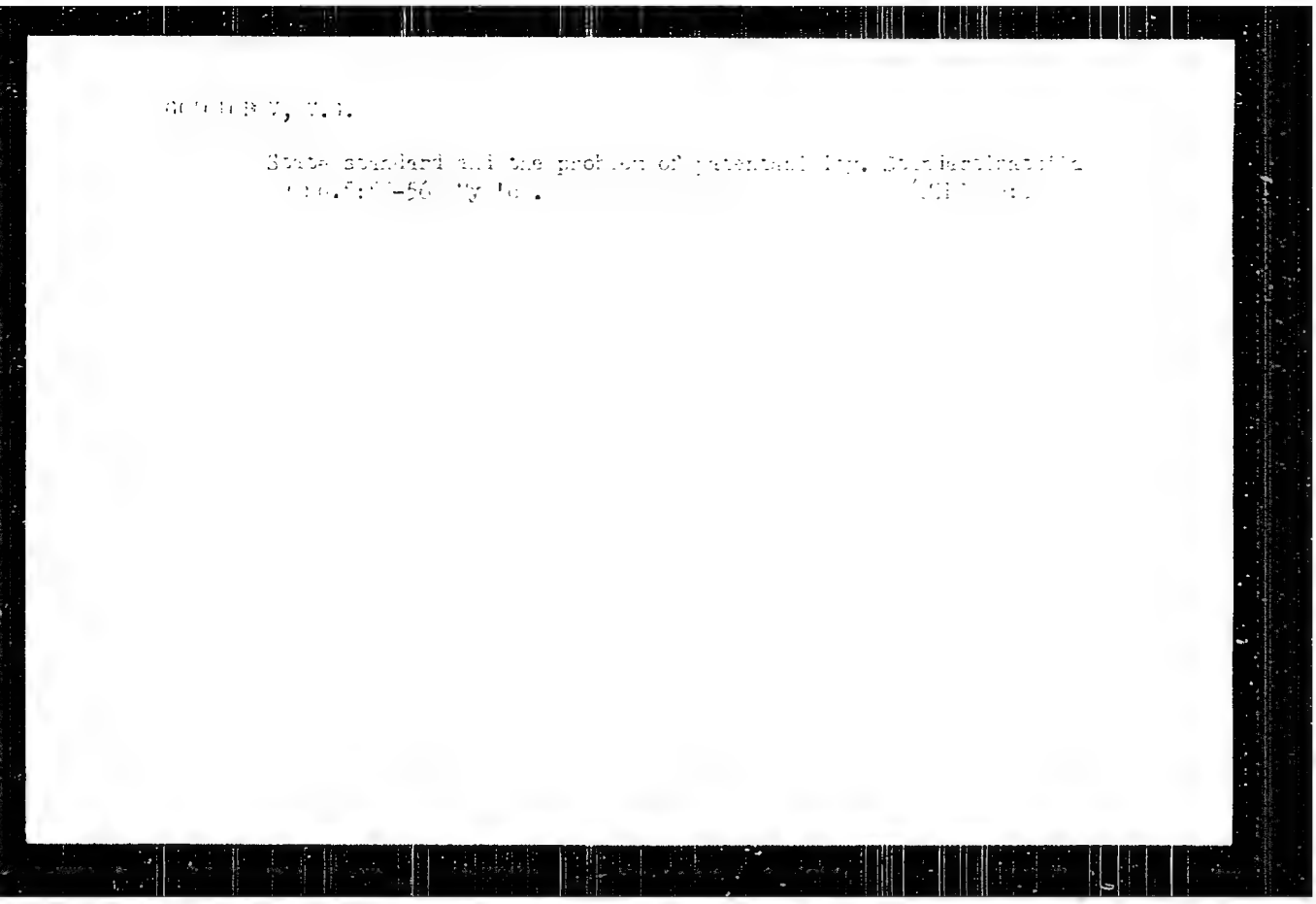
Machines manufactured by the Voronezh Ore-Dressing Equipment Factory. Gor. zhur. no.6:65-67 Je '62. (MIRA 15:11)

1. Voronezhskiy zavod gorno-obogatitel'nogo oborudovaniya.
(Voronezh--Ore dressing--Equipment and supplies)

GOLOLOBOV, V.G., inzh.; ZINOV'YEV, V.I., inzh.; GRIGHECHKIN, A.I., inzh.

Mining and ore dressing equipment of the Voronezh Plant. Gor. zhur. no.12:40-41 D '63. (MIRA 17:3)

1. Voronezhskiy zavod gornoobogatitel'nogo borudovaniya.



GOLOLOBOV, V.N.; ASTAPOV, S.I.; GROMYKO, I.I.; LOMSKOVA, A.L.; BELOUS, B.A., otv.red.; PEVZNER, A.S., zav.red.izd-va; RUDAKOVA, E.I., tekhn.red.

[Uniform time and pay standards for construction, assembly, and repair operations in 1960] Edinye normy i rastsenki na stroitel'nye, montazhnye i remontno-stroitel'nye raboty, 1960 g. Moskva, Gos.izd-vo lit-ry po stroit., arkhit. i stroit.materialam. Sbornik 23. [Electric-wiring operations] Elektromontazhnye raboty. No.1. [Electric lighting and strong-current wiring] Elektricheskoe osveshchenie i provodki sil'nogo toka. 1960. 45 p. (MIRA 13:6)

1. Russia (1923- U.S.S.R.) Gosudarstvennyy komitet po delam stroitel'stva. 2. Normativno-issledovatel'skaya stantsiya (NIS) pri ordena Lenina treste Yuzhelektromontazh Ministerstva stroitel'stva USSR (for Gololobov, Gromyko). 3. Normativno-issledovatel'skaya stantsiya No.9 TSentral'nogo normativno-issledovatel'skogo byuro Ministerstva stroitel'stva RSFSR (for Astapov, Lomskova).
(Wages) (Electric lighting) (Electric wiring)

GOLOLOBOV, V.N.

Experience in using lumped orders with increased indices of labor-productivity. Prom. energ. 15 no.7:45-47 Jl '60. (MIRA 15:1)
(Electricians)
(Electric wiring)

SOLCBOV, YA. K.

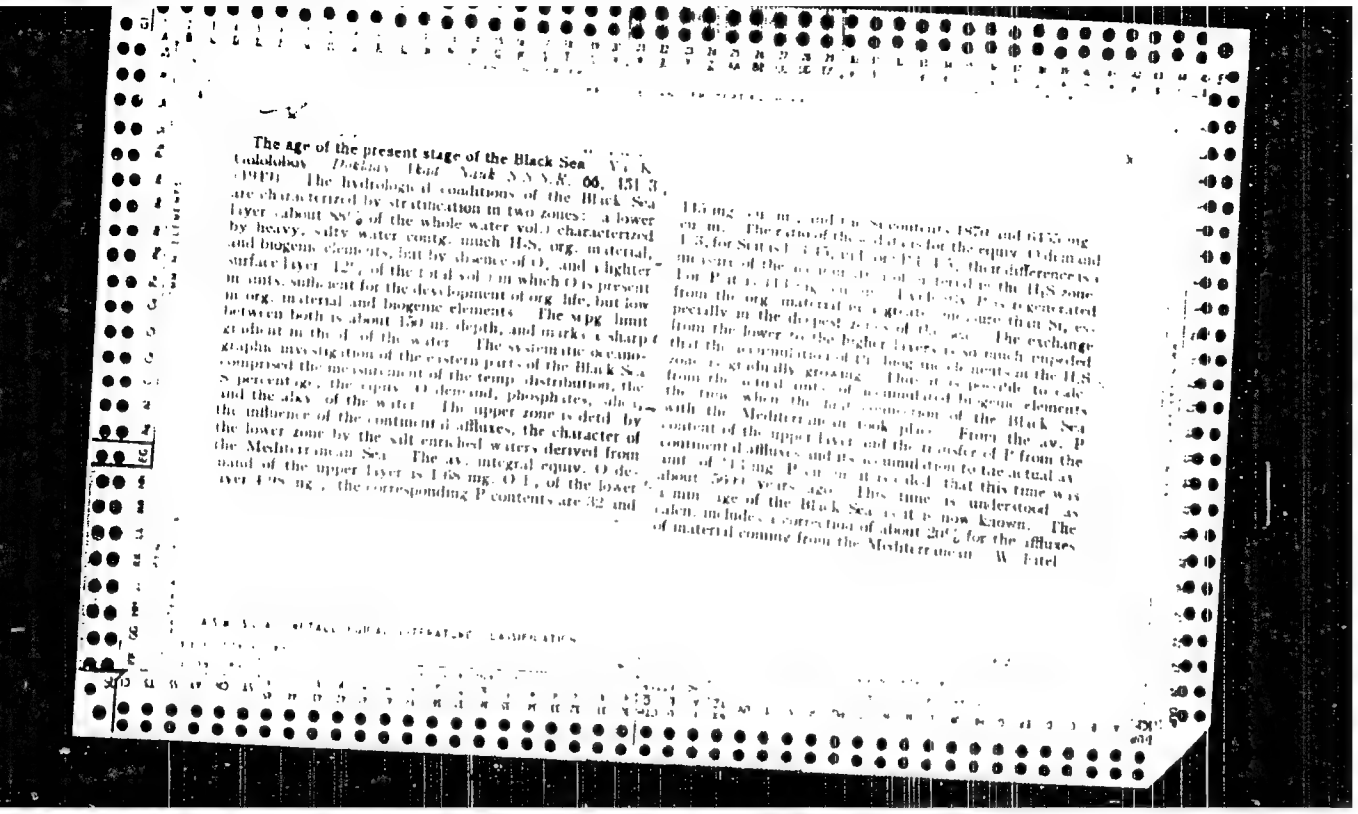
B/Oceanography Nov 48
Marine Composition
Hydrogen Sulfide Region of the Black Sea," Ya. K. Solcbov, Upper Boundary of the Hydrogen Sulfide Region of the Black Sea," Ya. K. Solcbov, Upper Boundary of the Eastern Section of the Black Sea, Oceanographic Lab, n the Eastern Section of the Black Sea, Oceanographic Lab, Kolchot, M. V. Firsova, Batumi, 3½ pp Kolchot, M. V. Firsova, Batumi, 3½ pp
Georgian Sta VNIRO, Vol XXII, No 2 Georgian Sta VNIRO, Vol XXII, No 2
Dok Ak Nauk SSSR, Vol LXII, No 2 Dok Ak Nauk SSSR, Vol LXII, No 2

Presence of hydrogen sulfide in deep water layers of the Black Sea is attributed to reduction of sulfates by bacteria, forming carbonates and Presence of hydrogen sulfide in deep water layers of the Black Sea is attributed to reduction of sulfates by bacteria, forming carbonates and [illegible] oxygen hydrogen sulfide. Its absence in the upper layer is caused by the large amount of dissolved [illegible] hydrogen sulfide. Its absence in the upper layer is caused by the large amount of dissolved oxygen

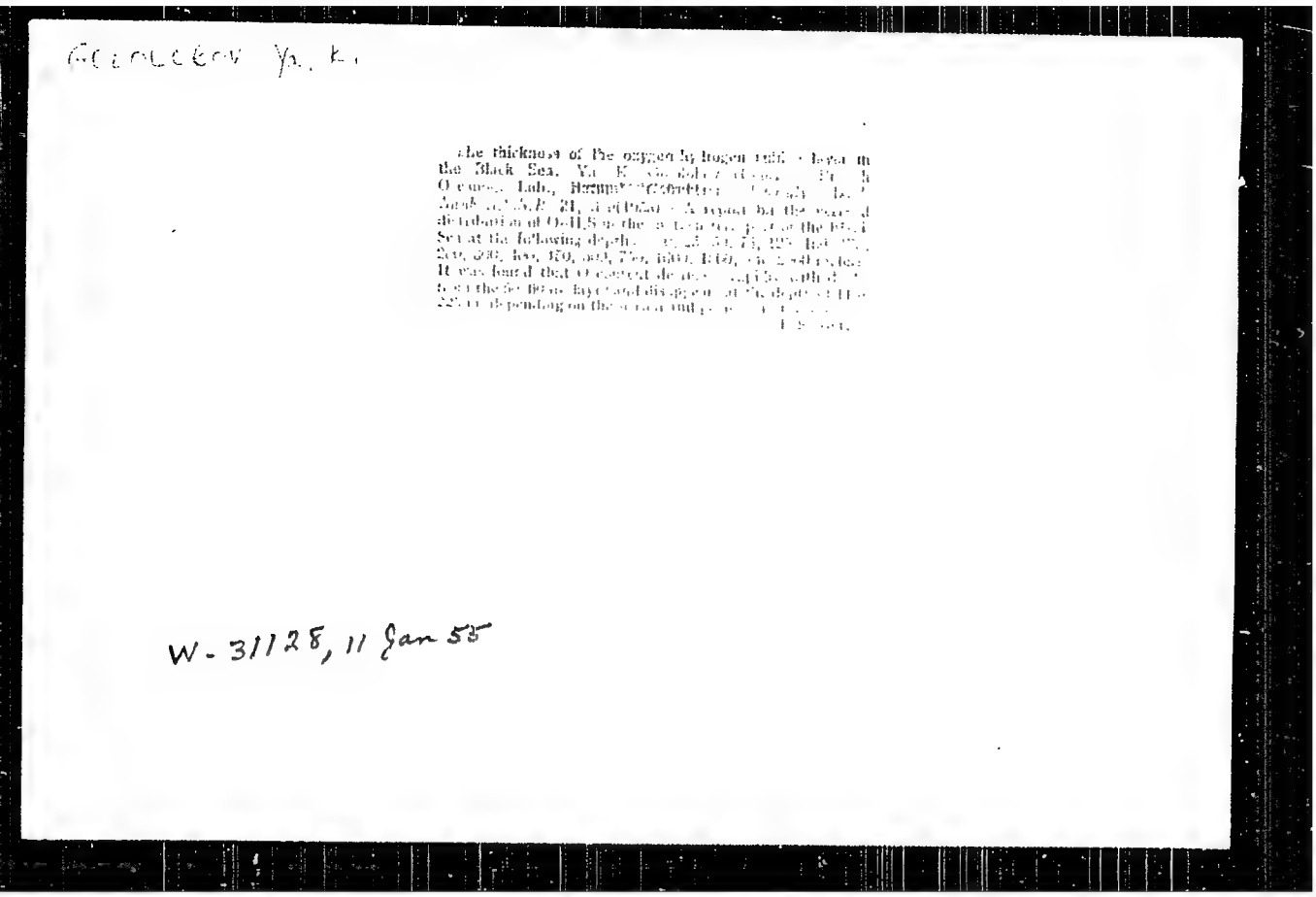
55/49777

USSR/Oceanography (Cont'd) Nov 48

A relief map of the upper surface of the hydrogen sulfide zone gives the sea's system of current and a possible method to estimate their local strength. Submitted by Acad D. S. Belyankin 17 Sep 48.



The age of the present stage of the Black Sea V. V. Goldobin *Doklady Akad. Nauk S.S.S.R.* **66**, 1313 (1949). The hydrological conditions of the Black Sea are characterized by stratification in two zones: a lower layer (about 88% of the whole water vol.) characterized by heavy, salty water contg. much H_2S, org. material, and biogenic elements, but by absence of O, and a lighter surface layer (12% of the total vol.) in which O is present in amts. sufficient for the development of org. life, but low in org. material and biogenic elements. The stg. limit between both is about 150 m. depth, and marks a sharp gradient in the O of the water. The systematic oceanographic investigation of the eastern parts of the Black Sea comprised the measurement of the temp. distribution, the S percentage, the equiv. O demand, phosphates, alkalinity and the alky. of the water. The upper zone is detd. by the influence of the continental affluxes, the character of the lower zone by the salt enriched waters derived from the Mediterranean Sea. The av. integral equiv. O demand of the upper layer is 1.68 mg. O/l., of the lower layer 4.08 mg., the corresponding P contents are 32 and 115 mg. eq. m., and the Si contents 1870 and 6150 mg. eq. m. The ratios of the above data for the equiv. O demand and P, for Si and P, and for Si and O, are 1:3, 1:3.5, and 1:3, the difference in the amounts of the equiv. O and P being due to the H_2S zone. For P and O, the ratio is 1:1. Part of the P is regenerated from the org. material on the bottom, especially in the deepest parts of the sea. The exchange from the lower to the higher layers is so much retarded that the accumulation of O, being the elements in the H_2S zone is gradually growing. Thus it is possible to calc. from the actual amts. of accumulated biogenic elements the time when the last connection of the Black Sea with the Mediterranean took place. From the av. P content of the upper layer and the transfer of P from the continental affluxes and its accumulation to the actual av. amt. of 115 mg. P eq. m., it is decided that this time was about 5600 years ago. This time is understood as the min. age of the Black Sea as it is now known. The calcn. includes a correction of about 20% for the affluxes of material coming from the Mediterranean. W. Fatel



Gerasimov Ya. K.

W-31128, 11 Jan 55

GOLOLOBOV, Ya.K.

Determination of phosphates in water of the Black Sea. Gidrokhim. mat. no.21:135-138 '53. (MLRA 7:3)

1. Okeanograficheskaya laboratoriya Gruzinskogo otdeleniya Azcherniro Batumi. (Black Sea--Phosphates) (Phosphates--Black Sea)

GOLOLOBOV, Ya.K.

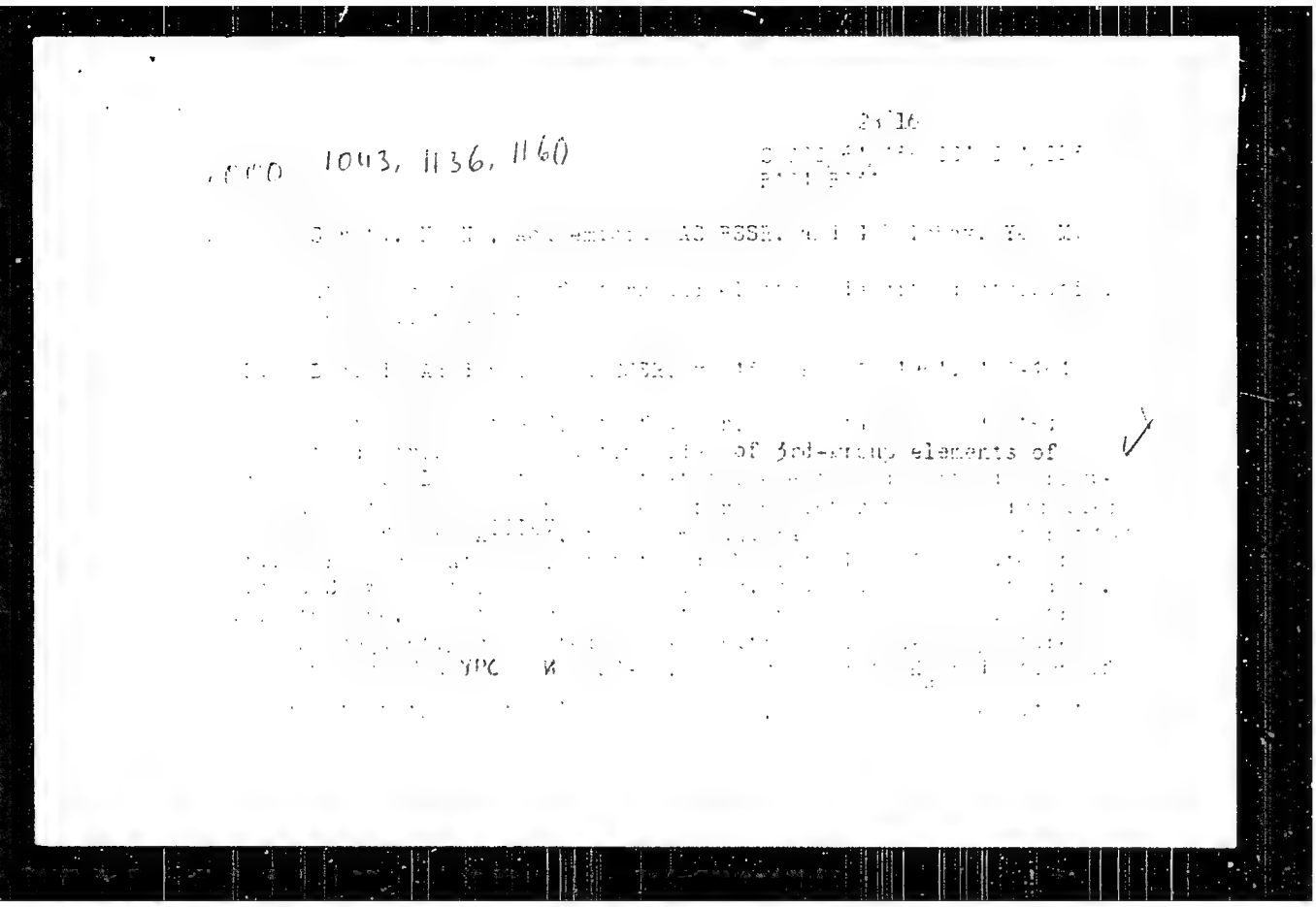
Causes responsible for many-year changes of hydrochemical and hydrological aspect of the upper active layer of the Black Sea. Dokl.AN SSSR 107 no.3:441-444 Ap '56. (MLRA 9:7)

1.Azovsko-Chernomorskiy nauchno-issledovatel'skiy institut morskogo rybnogo khozyaystva i okeanografii. Predstavleno akademikom N.M.Strakhovym.
(Black Sea--Oceanographic research)

GOLOLOBOV, Ye.M.; SIROTA, N.N.

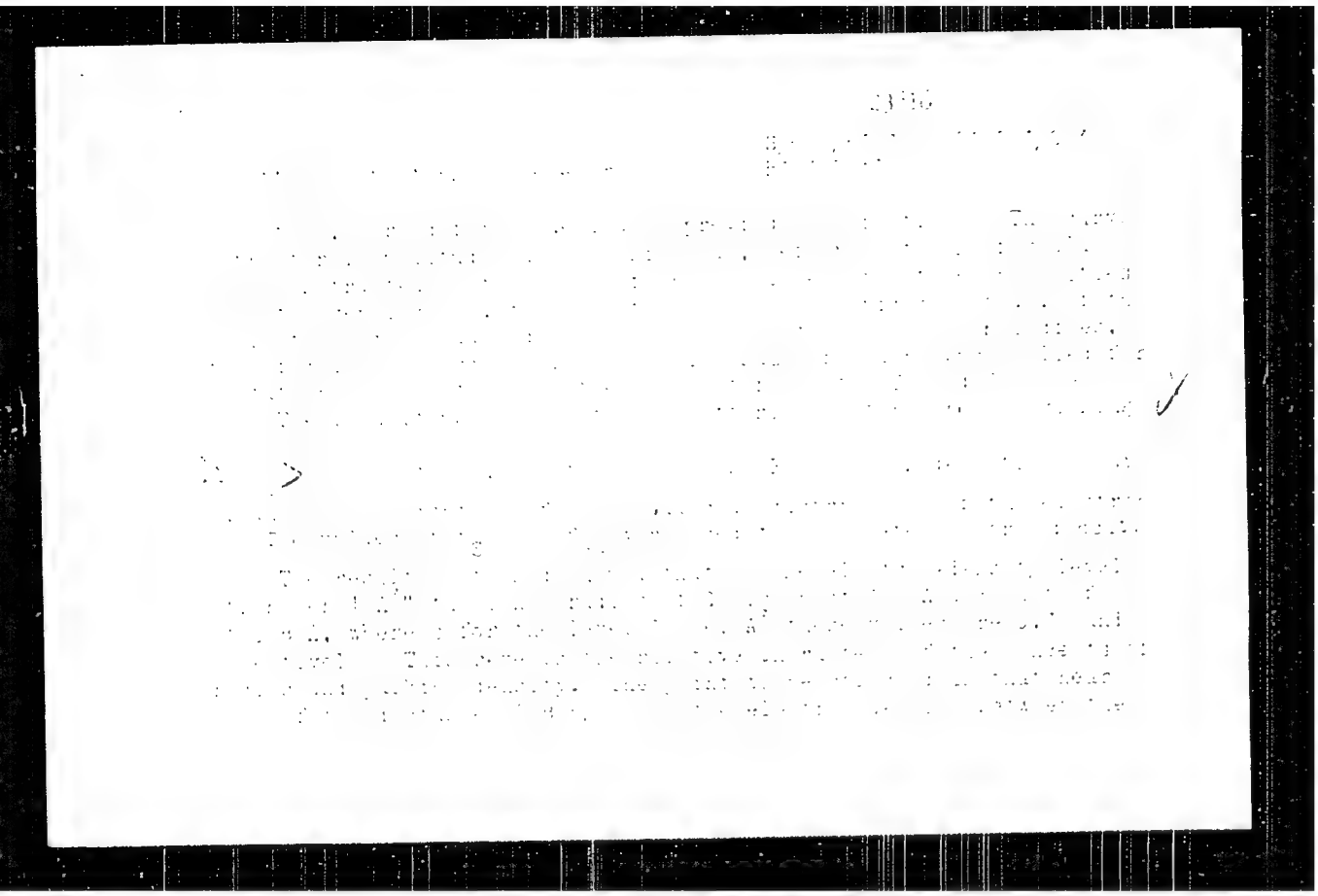
Characteristic temperature and coefficient of linear expansion of germanium. Dokl.AN BSSR 3 no.9:368-369 S '59.

(Germanium) (Expansion of solids) (MIRA 13:2)



1043, 1136, 1160

of 3rd-group elements of



23916

S/020/61/137/004/011/023
Atomic scattering factors and electron... B101/B201

Ga and Sb ions in the directions [111] and [11$\bar{1}$] in the (110) plane are almost symmetrical. Fig. 1 represents the electron density distribution in the (110) plane of the GaSb unit cell. Attention is drawn to the "bridges" of increased electron density between adjacent Ga and Sb ions. The authors believe that the results of the present work will offer a better insight into the character of interatomic interaction with regard to the physical properties of GaSb. There are 1 figure and 3 refer ences: 2 Soviet-bloc and 1 non-Soviet-bloc.

ASSOCIATION: Otdel fiziki tverdogo tela i poluprovodnikov Akademii nauk BSSR (Division of Solid State Physics and Semiconductors of Academy of Sciences, BSSR)

SUBMITTED: December 12, 1960

Card 3/7

S/020/62/143/001/026/030
B101/B147

AUTHORS: Sirota, N. N., Academician AS BSSR, and Cololobov, Ye. N.

TITLE: Electron density distribution in indium antimonide

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 143, no. 1, 1962, 155 - 158

TEXT: The authors studied the change of the atomic scattering factor of indium and antimony ions in InSb single crystals purified by zone melting and then pulverized (particle size 5 μ) with a [illegible] - 50 -. (URS - 50 - I) x - ray recording unit. The absolute intensity I_{hkl} of the reflexes was determined from experimental data, and the structural factors f_1(Sb) and f_2(In) were calculated. The logarithms of f_1 at $\sum_{i=1}^{3} h_i^2 \cdot 8$ and f_2

Card 1/3

Electron density distribution ...

at $\sum_{i=1}^{3} h_i^2 = 11$ form a straight line. The straight sections are characterized by $f_{Sb}(0) = 44.46$, $\tan_{Sb} = 0.02$; $f_{In}(0) = 39.65$, $\tan_{In} = 0.019$. The electron density distribution follows the Gauss function $\rho_1 = A \exp(-\ldots r_1^2)$, with $A_{Sb} = 323.084$; $A_{In} = 317.414$; $\sigma_{Sb} = 11.750$; $\sigma_{In} = 12.596$. Increased electron density between In and Sb ions was observed in the (110) plain: between 000 and 1/4 1/4 1/4, and between 1/4 1/4 1/4 and 111 along 111, and also between 1/4 1/4 1/4 and 001 along 113. In the plane with the electron density 0.5 el/Å^3, the ionic radius of Sb is 1.00 Å, that of In is 1.05 Å. In the 0.25 el/Å^3 plane, the ionic radii of both Sb and In are 1.40 Å. There are 4 figures and 5 references: 4 Soviet and

Card 2/3

[illegible] ...

[illegible]

[illegible]

Card 3/3

S/020/62/144/002/024/028
B101/B110

AUTHORS: Sirota, N. N., Academician AS BSSR, and Gololobov, Ye. M.

TITLE: Atomic scattering factors and electron density distribution ... aluminum antimonide at 20 and -100°C

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 144, no. 2, 1962, 399 - 401

TEXT: Concluding a series of studies on atomic scattering factors of ... antimonides the authors give the scattering factors of the AlSb ions and the electron density in AlSb as determined by a method described earlier (DAN, 141, no. 2 (1962)). The squares F^2 of the structural amplitudes are calculated from the intensity of the powder pattern reflexes (cf. Fig. 1); of the electron density: at 20°C: $A_{Al} = 62.381$; $\alpha_{Al} = 11.587$; $A_{Sb} = 418.413$; $\alpha_{Sb} = 14.716$; at - 100°C: $A_{Al} = 66.951$; $\alpha_{Al} = 12.411$; $A_{Sb} = 466.46$; $\alpha_{Sb} = 15.671$. The electron density distribution in the [111] and [115] directions of the (110) plane of the unit cell does not essentially differ from that of GaSb and InSb. Estimation of the ionic radii gives the following

Card 1/3

Atomic scattering factors and ...

values in the plane with 1 el/Å^2 electron density: r_{Al} = 0.6 Å, r_{Sb} = 0.95 Å, and in the plane with 0.5 el/Å^2 electron density: r_{Al} = 3.75 Å, r_{Sb} = 1.7 Å. The characteristic temperatures Θ for AlSb, GaSb, and InSb are 320, 240, and 210°K, respectively. The data serve as a contribution to the investigation of interatomic interaction in $A^{III}B^{V}$ semiconductors. There are 4 figures. The most important English-language reference is: G. Giesecke, H. Pfister, Acta Crystallogr., 11, pt. 5 (1958).

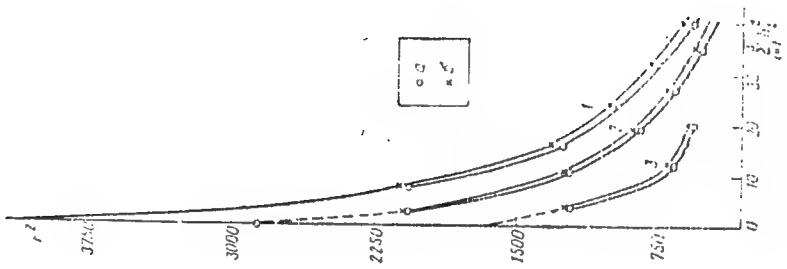
ASSOCIATION: Otdel fiziki tverdogo tela i poluprovodnikov Akademii nauk BSSR (Department of Solid-state Physics and Semiconductors of the Academy of Sciences BSSR)

SUBMITTED: January 26, 1962

Fig. 1. F^2 as a function of $\sum_{i=1}^{3} h_i^2$: (1) for reflexes with even indices, whose sum is divisible by four; (2) for reflexes with odd indices; (3) for reflexes with even indices whose sum is indivisible by four; (4) at 20°C; Card 2/3

S/020/62/144/002/024/028
B101/B110

...



Card 3/3

ACCESSION NR: AP4040949 S/0020/64/156/005/1075/1078

AUTHOR: Sirota, N. N. (Academician, AN BSSR); Gololobov, Ye. M.

TITLE: Experimental determination of magnitude of effective ion charges in A sup III B sup V compounds by X-ray data

SOURCE: AN SSR. Doklady*, v. 156, no. 5, 1964, 1075-1078

TOPIC TAGS: ion charge, effective ion charge, solid state physics, solid state circuitry, A sup III B sup V compound, semiconductor

ABSTRACT: The authors attempted an experimental determination of the magnitude and sign of the effective ion charge in A III B V compounds of a sphalerite structure by X-ray analysis data. The absolute values of F_{200} for this type of compound were thoroughly defined. The experimentally defined values of the structural amplitudes of the line (200) correspond to a true difference of the atom scattering factors of the ions in an A III B V compound under an actually existing degree of ionization. Compounds in this series included AlP, GaP, InP, AlAs, GaAs, InAs, AlSb, GaSb and InSb. The authors found that the third group elements--metals--lose electrons and become positively charged ions. The B V elements accept electrons and become negatively charged ions. "Authors express

Card 1/2

ACCESSION NR: AP4040949

their thanks to N. M. Olekhovich for valuable discussions." Orig. art. has: 1 figure and 2 tables.

ASSOCIATION: Institut fiziki tverdogo tela i poluprovodnikov Akademii nauk BSSR (Institute of Solid State Physics and Semiconductors, Academy of Sciences, BSSR)

SUBMITTED: 12Mar64 ENCL: 00

SUB CODE: SS, NP NO REF SOV: 004 OTHER: 008

Card 2/2

L 7924-66 EWA(k)/EWT(1)/EWT(m)/EPF(n)-2/EPA(w)-2/EWA(m)-2/EWA(b) IJP(c) UR/AT

ACC NR: AP5027929 SOURCE CODE: UR/0363/65/001/010/1673/1683

AUTHOR: Sirota, N. N.; Gololobov, Ye. M.; Sheleg, A. U.; Olekhnovich, N. M.

ORG: Institute of Solid State Physics and Semiconductors, Academy of Sciences, BSSR, Minsk (Institut fiziki tverdovo tela i poluprovodnikov Akademii nauk BSSR)

TITLE: Potential and limitations of the use of x-ray diffraction methods for studying the nature of chemical bonding in crystals

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 1, no. 10, 1965, 1673-1683

TOPIC TAGS: x-ray diffraction analysis, neutron diffraction, electron density, electron diffraction analysis, chemical bonding, crystal structure analysis

ABSTRACT: The experimental determination of electron density distribution in crystals involves measurement of the intensities of x-ray scattering peaks, finding of structural amplitudes, calculation of the form factors of ions, reduction of the values obtained to absolute zero temperature, and summation of three-dimensional Fourier series. Each of these operations is discussed in detail. X-ray diffraction methods make it possible to give quantitative experimental expressions to the wave functions of electrons in crystal lattices. Of great significance to the study of chemical bonding is the possibility of estimating the electron density distribution over the electron shells. For example, the use of form factors obtained by neutron and x-ray scattering has permitted the determination of the distribution of all electrons, including those with unpaired spins, in the 3d shell in the lattice of ferromagnetics and

Card 1/2 UDC: 541.57:548.19

L 7924-66

ACC NR: AP5027929

19

antiferromagnetics. However, X-ray-, electron-, and neutron-diffraction methods cannot as yet solve problems involving electron distribution at low densities or when the density changes are slight (not exceeding 0.02 — 0.05 e1/Å^3). For example, it is not possible at the present time to determine by x-ray diffraction the number of electrons which migrate from the valence band to the conduction band under the influence of thermal motion or photo-electric effects in semiconductor crystals. Despite such limitations, these methods are of paramount importance for studying electron density distributions in crystals. Orig. art. has: 7 figures.

SUB CODE: SS, GC, IC / SUBM DATE: 05Jul65 / ORIG REF: 019 / OTH REF: 011

PC

Card 2/2

GOLOLOBOV, Ye.M. [Halalobau, IA.M.]

Determining the heat of atomization and the effective charges of ions of $A^{I}B^{VII}$ on data of X-ray diffraction analysis. Vestsi AN BSSR. Ser.fiz.-mat.nav. no.1:110-119 '65. (MIRA 19:1)

L 18483-66 EWT(1)/EPF(n)-2/ETC(m)-6 IJP(c) GS/AT
ACC NR: AT6006167 SOURCE CODE: UR/0000/65/000/000/0093/0096

AUTHOR: Sirota, N. N. (Academician AN BSSR); Gololobov, Ye. M.

89
B71

ORG: none

TITLE: Heats of atomization and formation of $A^{III}B^{V}$ type compounds determined from experimental data on electron density distribution

SOURCE: Khimicheskaya svyaz' v poluprovodnikakh i tverdykh telakh (Chemical bond in semiconductors and solids). Minsk, Nauka i tekhnika, 1965, 93-96

TOPIC TAGS: x ray, electron density, heat of formation, heat of dissociation, heat of atomization, heat of sublimation, aluminum compound, gallium compound, indium compound, arsenic compound, antimony compound

ABSTRACT: The heats of atomization and formation of AlAs, GaAs, InAs, AlSb, GaSb, and InSb were calculated from the data on electron density distribution determined experimentally by x-ray technique. The x-ray measurements were made at 20°C and -100°C. The object of the work was to compare the heats of atomization and formation of $A^{III}B^{V}$ type compounds determined from x-ray data with data based on the

Card 1/2

L 18483-66

ACC NR: AT6006167

calorimetric technique. The energy of interatomic interaction u was expressed as a sum: $u = u_c + u_k + u_a$; where u_a is a term relating to the coulombic interaction, u_k is a term expressing a change in the kinetic energy of electrons in the area of orbital overlapping of A^{III} and B^{V} atoms, and u_a is a term expressing a change in the exchangeable energy resulting from orbital overlapping. The sum of $U_c + U_k + U_a$ represents the heat of atomization of a compound U_{AB}. If the heats of sublimation of the individual components of a compound (U_A and U_B) are known, the heat of formation of a compound ΔH can be determined by the formula:

$$\Delta H = U_{AB} - (U_A + U_B).$$

The heats of atomization and formation for several $A^{III}B^{V}$ type compounds are presented in tabular form. Orig. art. has: 2 figures, 1 table, 8 formulas.

SUB CODE: 20, 11 SUBM DATE: 31May65/ ORIG REF: 008/ OTH REF: 001

Card 2/2

L 18836-66 EWT(1) IJP(c) GS/AT
ACC NR: AT6006168 SOURCE CODE: UR/0000/65/000/000/0097/0102

AUTHOR: Gololobov, Ye. M.; Sirota, N. N. (Academician AN BSSR)

ORG: none

TITLE: Electron density distribution and bonding energies in $A^{III}B^{V}$ semiconductor compounds

SOURCE: Khimicheskaya svyaz' v poluprovodnikakh i tverdykh telakh (Chemical bond in semiconductors and solids). Minsk, Nauka i tekhnika, 1965, 97-102

TOPIC TAGS: electron density, semiconductor, aluminum compound, gallium compound, indium compound, arsenic compound, antimony compound, heat of atomization, heat of formation, Coulomb interaction, chemical bonding

ABSTRACT: The heats of atomization of AlAs, GaAs, InAs, AlSb, GaSb, and InSb were determined on the basis of electron density distribution (f-curves). Three cases were considered for calculating the energy of interatomic interaction u within the $A^{III}B^{V}$ type compounds according to equation: $u = u_c + u_k + u_a$, where u_c is a term relating to the Coulombic interaction, u_k is a term expressing a change in the

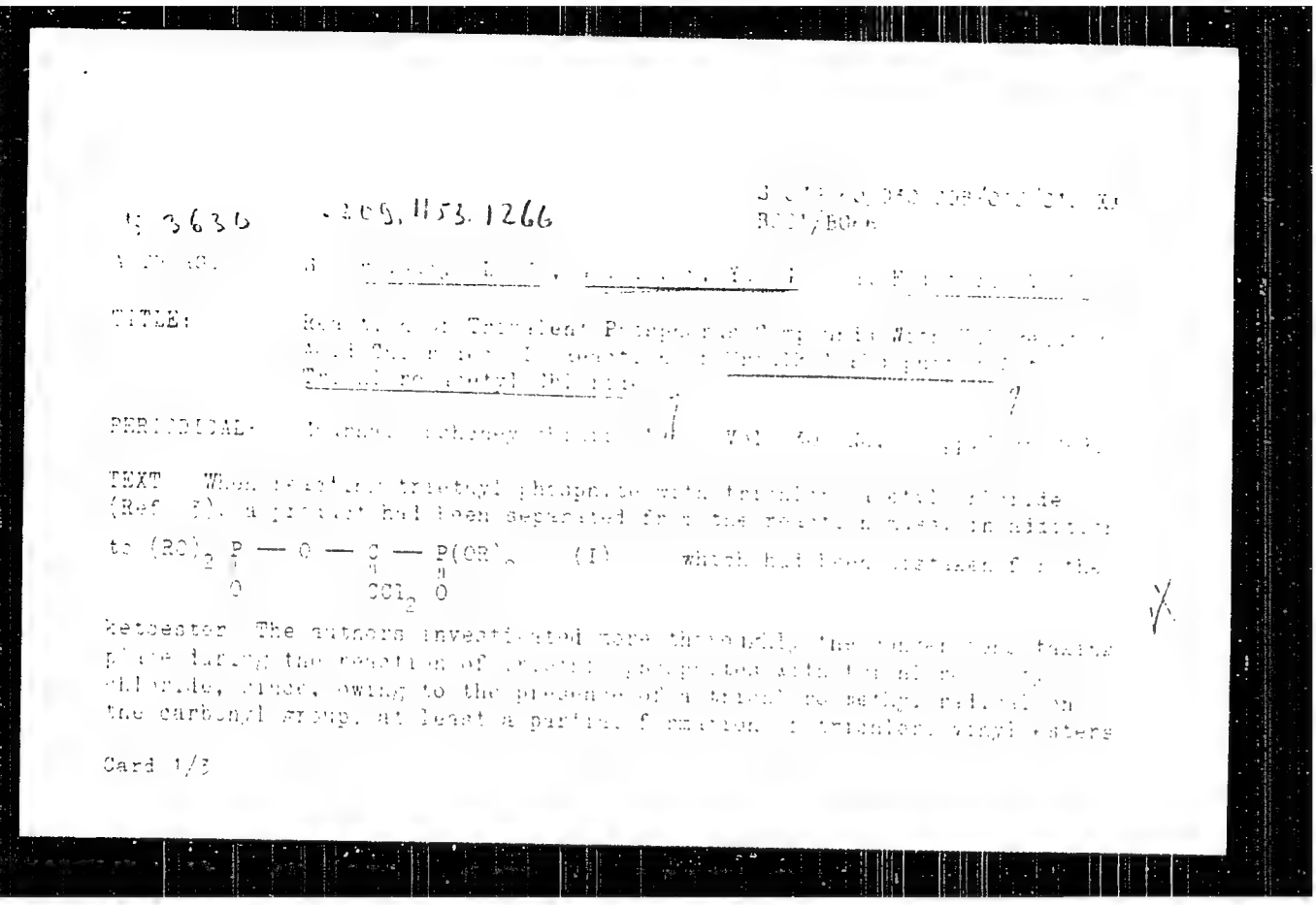
Card 1/2

L 18836-66
ACC NR: AT6006168

kinetic energy of electrons in the area of orbital overlapping of A^{III} and B^{V} atoms, and u_a is a term expressing a change in the exchangeable energy resulting from orbital overlapping. In the first case the u_k is determined on the basis of Thomas-Fermi-Dirac statistics. In the second more approximate case, in addition to the Coulombic interaction, the electronic interaction between atom A and ion B in the area of orbital interaction for all elements of the orbital overlap was also considered. The third case is based on a more rigorous involvement of V_A and V_B potentials when considering the u_c energy contributions. The heats of atomization for several arsenides and antimonides are given in a table. The corresponding heats of formation can be readily computed using the values of heats of sublimation of the individual components of a compound (U_A and U_B). It was found that heats of atomization and formation of the $A^{III}B^{V}$ type compounds, determined on the basis of electron density distribution (f-curves), are somewhat less accurate but generally very close to the corresponding experimental data. Orig. art. has: 1 figure, 1 table, 12 formulas.

SUB CODE: 07/ SUBM DATE: 31May65/ ORIG REF: 004/ OTH REF: 000

Card 2/2 vmb



AUTHOR: [illegible]

TITLE: [illegible]

PERIODICAL: [illegible]

TEXT: When treating triethyl phosphite with trichloro acetyl chloride (Ref 1), a product has been separated for the first time, in addition to $(RO)_2 \overset{O}{\underset{}{P}} - O - \overset{O}{\underset{CCl_2}{C}} - \overset{O}{\underset{}{P}}(OR)_2$ (I) which has been obtained by the Kabachnik The authors investigated more thoroughly the course of this reaction by the reaction of acetyl chloride and trichloro acetyl chloride, since, owing to the presence of a bromine atom, related to the carbonyl group, at least a partial formation of bromides might occur

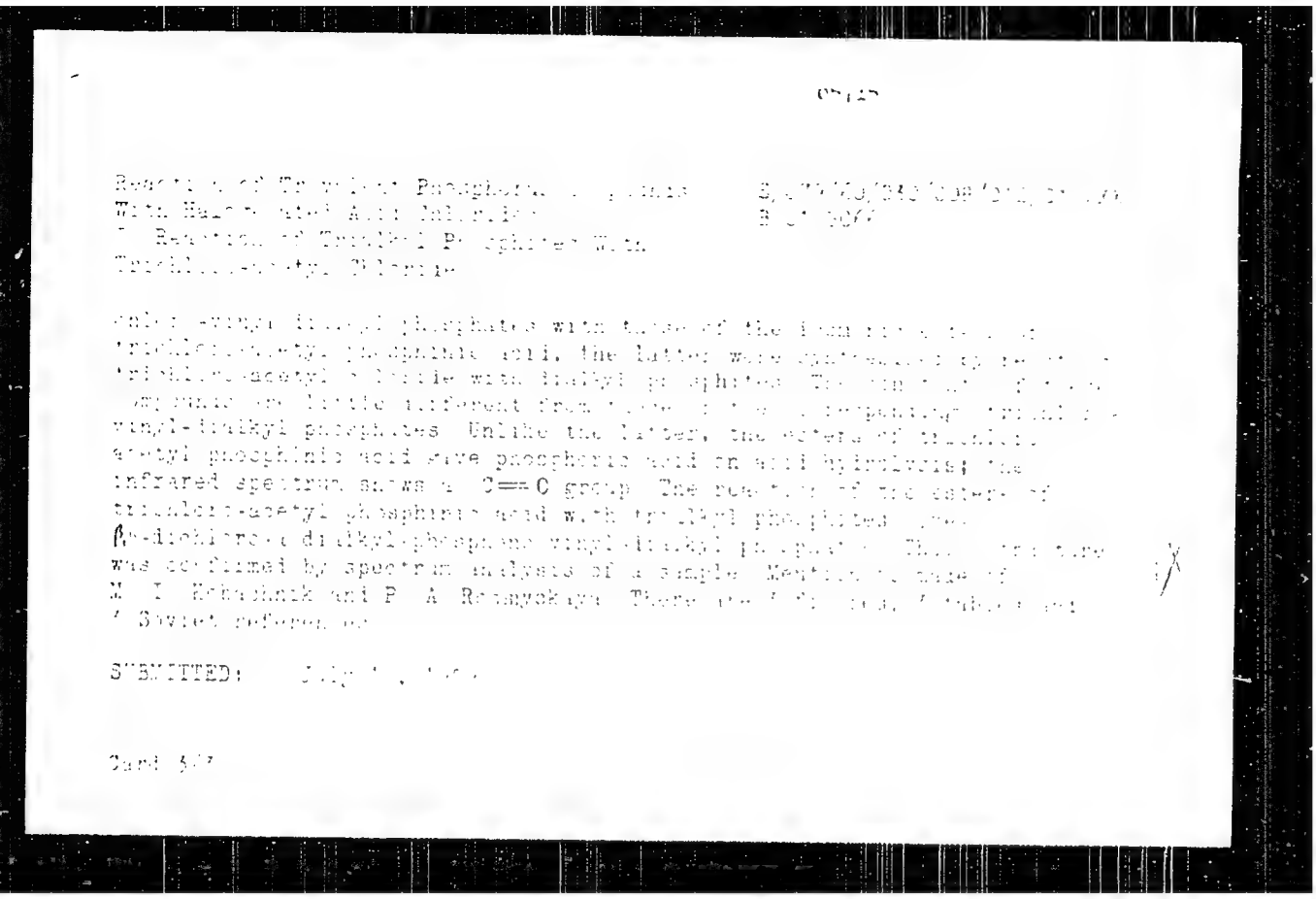
Card 1/3

Reaction of Trivalent Phosphorus Compounds With Halogenated Acid Chlorides. I. Reaction of Trialkyl Phosphites With Trichloroacetyl Chloride

A short communication was to be expected

$$(RO)_3P + CCl_3C(=O)Cl \longrightarrow (RO)_2P(=O)CCl=CCl_2 + RCl$$

In the reaction of trialkyl phosphites with trichloroacetyl chloride under mild conditions, in addition to the expected (yields, 15-25%) compounds were obtained which were identified as trichlorovinyldialkyl phosphates. Molecular weight determinations indicated that there was only one chlorine atom in the molecule. The investigation of the reaction products showed that two chlorine atoms in five-membered heterocyclic rings are completely converted to phosphate groups in the



Reaction of Trivalent Phosphorus [illegible]
With Halogen-Substituted Acyl Chlorides
[illegible] Reaction of Trivalent Phosphorus Acids
Trichloroacetyl Chloride

[illegible] vinyl dialkyl phosphates with esters of the [illegible] trichloroacetyl phosphonic acid, the latter were synthesized by the reaction of trichloroacetyl chloride with dialkyl phosphites. The [illegible] appeared to be little different from those of the isomeric trichloroacetyl vinyl-dialkyl phosphates. Unlike the latter, the esters of trichloroacetyl phosphinic acid gave phosphoric acid on acid hydrolysis; the infrared spectrum showed a C=O group. The reaction of the esters of trichloroacetyl phosphinic acid with trialkyl phosphites gave β,β-dichloro-α-dialkyl-phosphono vinyl-dialkyl phosphates. This structure was confirmed by spectrum analysis of a sample. Mentioned are M. I. Kabachnik and P. A. Rezepokaya. There are 4 [illegible] and 4 Soviet references.

SUBMITTED: [illegible]

Card 3/3

ACCESSION NR. AP4022961 S/0079/64/034/003/0866/0869

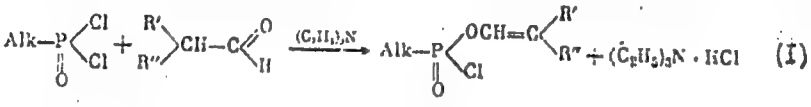
AUTHOR: Gololobov, Yu. G.; Dmitriyeva, T. F.; Soborovskiy, L.Z.

TITLE: Vinyl ester of phosphoric acids
3. Acid chlorides of Alpha-alkenyl esters of alkylphosphonic acids

SOURCE: Zhurnal obshchey khimii, v. 34, no. 3, 1964, 866-869

TOPIC TAGS: Vinyl ester, phosphoric acid, acid chloride, alpha-alkenyl ester, alkylphosphonic acid, triethylamine

ABSTRACT: Previously unknown acid chlorides of α-alkenyl esters of alkylphosphonic acids were obtained from dichloroanhydrides of alkylphosphonic acids during a reaction of the latter with equimolecular amounts of aldehydes in the presence of triethylamine. The reaction should be stopped at the stage of formation of monovinyl esters.

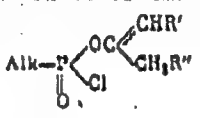


(I)

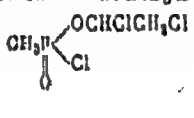
Similarly, during the reaction of dichloroanydrides of alkylphosphonic acids with

Card 1/3

ketones, the previously unknown acid chlorides of the second α-alkenyl esters of the standard acids (II) were obtained.

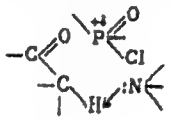


(II)



(III)

It is possible that the formation of vinyl esters (I) and (II) occurs through the intermediate cyclic complex



(IV)

which develops during an attack by triethylamine, on the protonizing hydrogen atom, with subsequent weakening of the (P-Cl)-bond. The possibility of contact of the positively charged phosphorous with hydrogen of the carbonyl group, favors the

ACCESSION NR. AP4022961

given process. The intermediate complex described decomposes during the rupture of the corresponding (P-Cl)- and (C-H)-bonds with a formation of vinyl ester and triethylamine hydrochloride. "Spectrum research was by V. V. Fedotova and S. S. Dubovoy". Orig. Art. has: 1 table

ASSOCIATION: none

SUBMITTED: 24Jan63 DATE ACQ: 15Apr64 ENCL: 00

SUB CODEL CH No. REF. SOV: 004 OTHER: 005

Card 3/3

L 35069-65 EWT(m)/EPF(c)/EPR/EWP(j)/EWA(c) Pc-4/Pr-4/Ps-4 RPL WW/RM
ACCESSION NR: AP5008521 S/0266/65/000/006/0026/0026

AUTHOR: Gololobov, Yu. G.; Dmitriyeva, T. F.; Soborovskiy, L. Z.; Zirov'yev, Yu. M.; Knunyants, I. L.; Sterlin, R. N.

TITLE: A method for producing alkyltrifluorovinylalkylphosphinates. Class 12, No. 169118

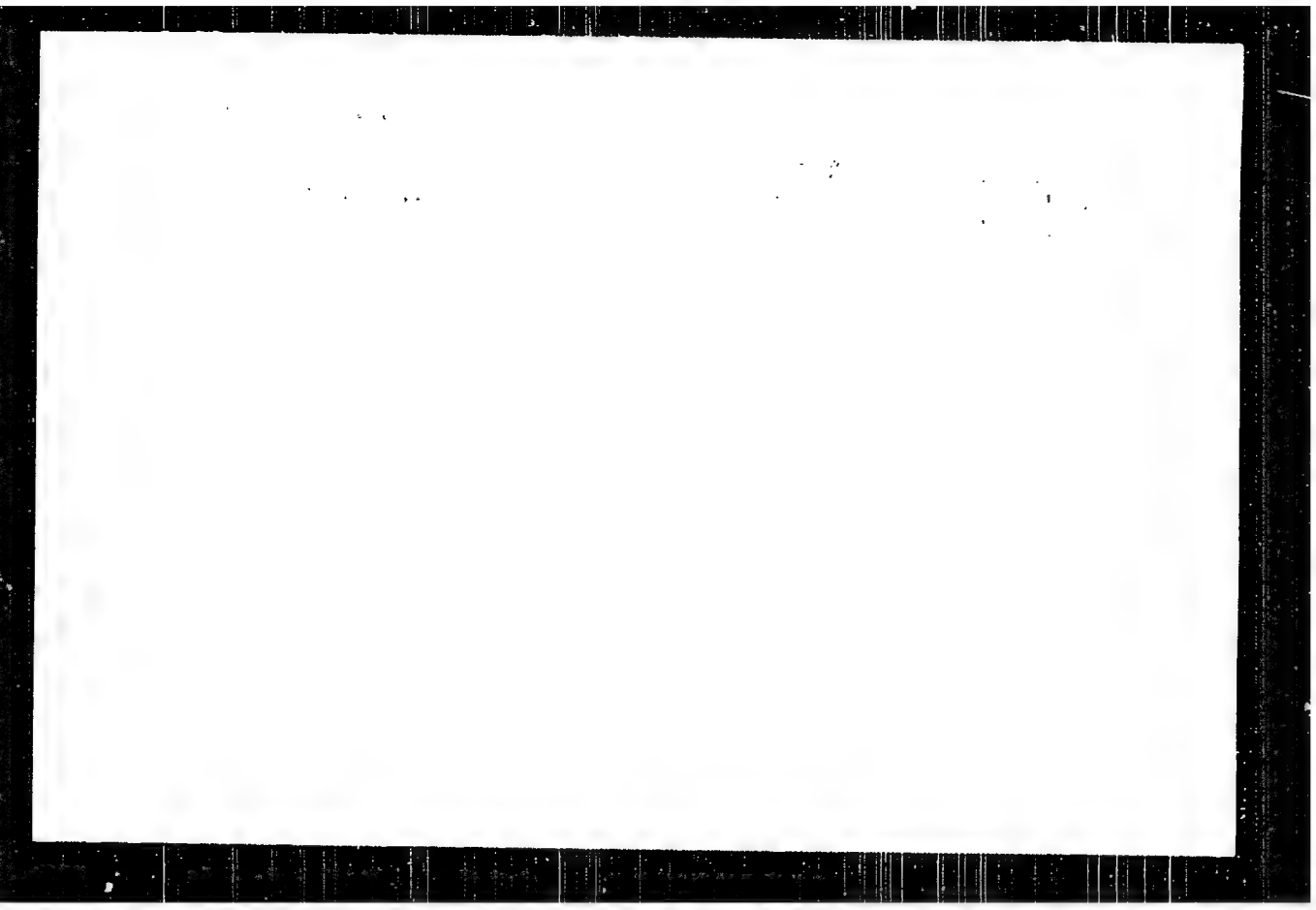
SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 6, 1965, 26

TOPIC TAGS: fluorine compound, phosphonic acid, organo metallic compound, mercury organic compound

ABSTRACT: This Author's Certificate introduces a method for producing alkyltrifluorovinylalkylphosphinates. Acid esters of alkylphosphonic acids are interacted with perfluorovinylmercury during heating. The Author's Certificate also covers a modification of this method in which a heating temperature of approximately 100°C is used.

ASSOCIATION: none

SUBMITTED: 20Feb64 ENCL: 00 SUB CODE: GC, OC
NO REF SOV: 000 OTHER: 000
Card 1/1



L 29277-66 -EWP(j)/EWT(m)/T RM

ACC NR: AP6019321 SOURCE CODE: UR/0079/65/035/008/1460/1463

AUTHOR: Gololobov, Yu. G.; Dmitriyeva, T. F.; Zinov'yev, Yu. M.; Soborovskiy, L. A.

ORG: none

TITLE: Vinyl esters of phosphorus acids. IV. Vinyl chlorophosphates

SOURCE: Zhurnal obshchey khimii, v. 35, no. 8, 1965, 1460-1463

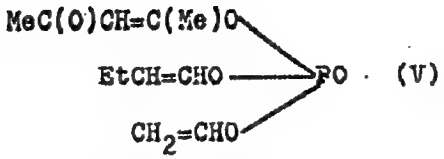
TOPIC TAGS: phosphate ester, acetaldehyde, organic synthetic process

ABSTRACT: In the reaction of $POCl_3$ with acetaldehyde at 80-100° in an autoclave at about 2 atm in the presence of triethylamine, vinyl dichlorophosphate (I) or divinyl chlorophosphate (II) formed depending on the molar ratio of the initial substances: $MeCHO + POCl_3 + Et_3N \rightarrow CH_2=CHOP(O)Cl_2$ (I); $2MeCHO + POCl_3 + 2\ Et_3N \rightarrow (CH_2=CHO)_2P(O)Cl$ (II). (I) had been prepared for the first time. By the reaction of (I) with dimethylamine, vinyl dimethylamidochlorophosphate (III) was prepared. (I) could be used as a starting material for the synthesis of phosphates with two different α-alkenyl ester groups - e.g., the reaction of (I) with butyraldehyde in the presence of Et_3N yielded vinyl - butenyl-1 chlorophosphate (IV). By treating (IV) with acetylacetone in the presence of Et_3N, the compound

Card 1/2 UDC: 546.185:547.361.21

L 29277-66

ACC NR: AP6019321

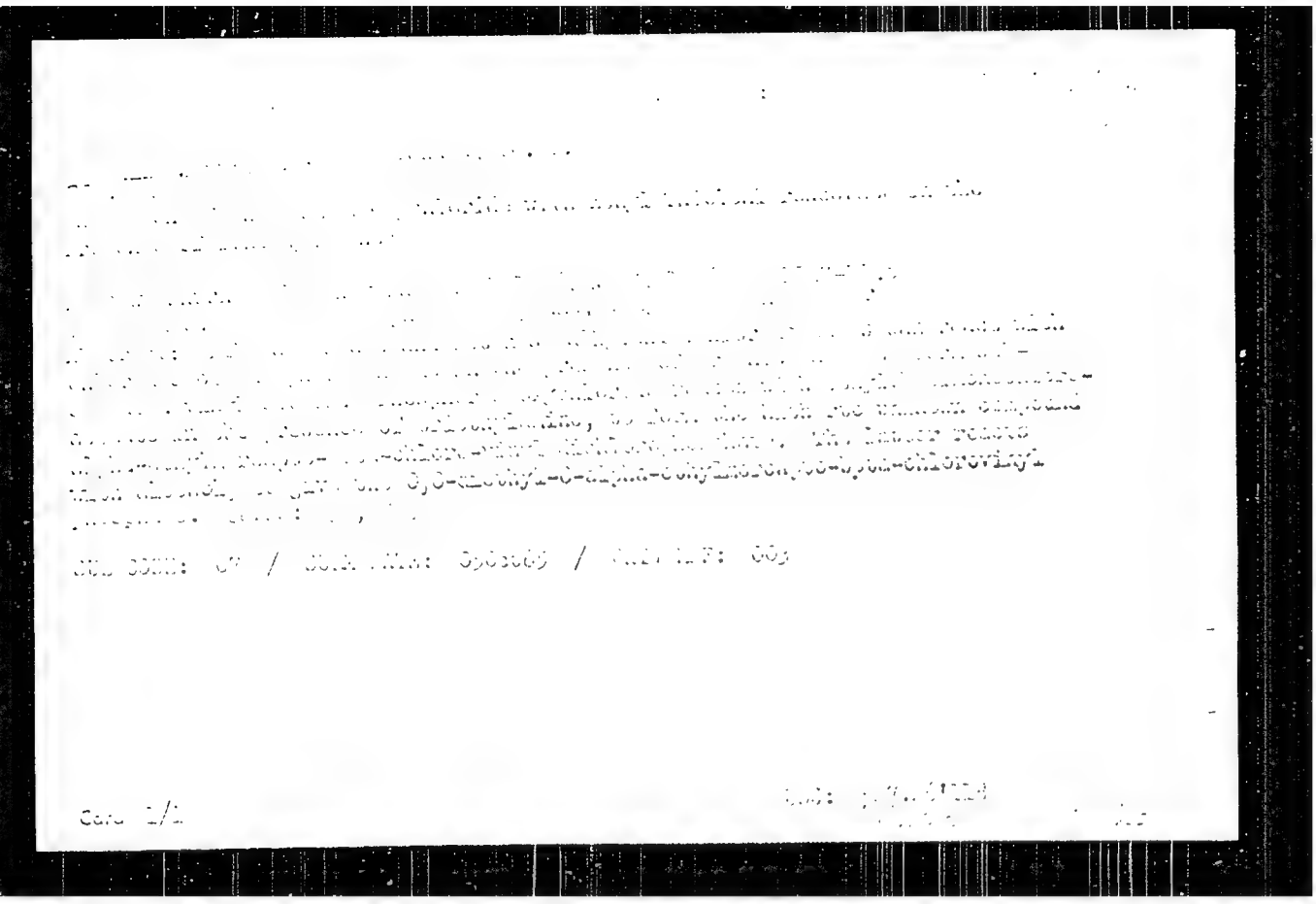


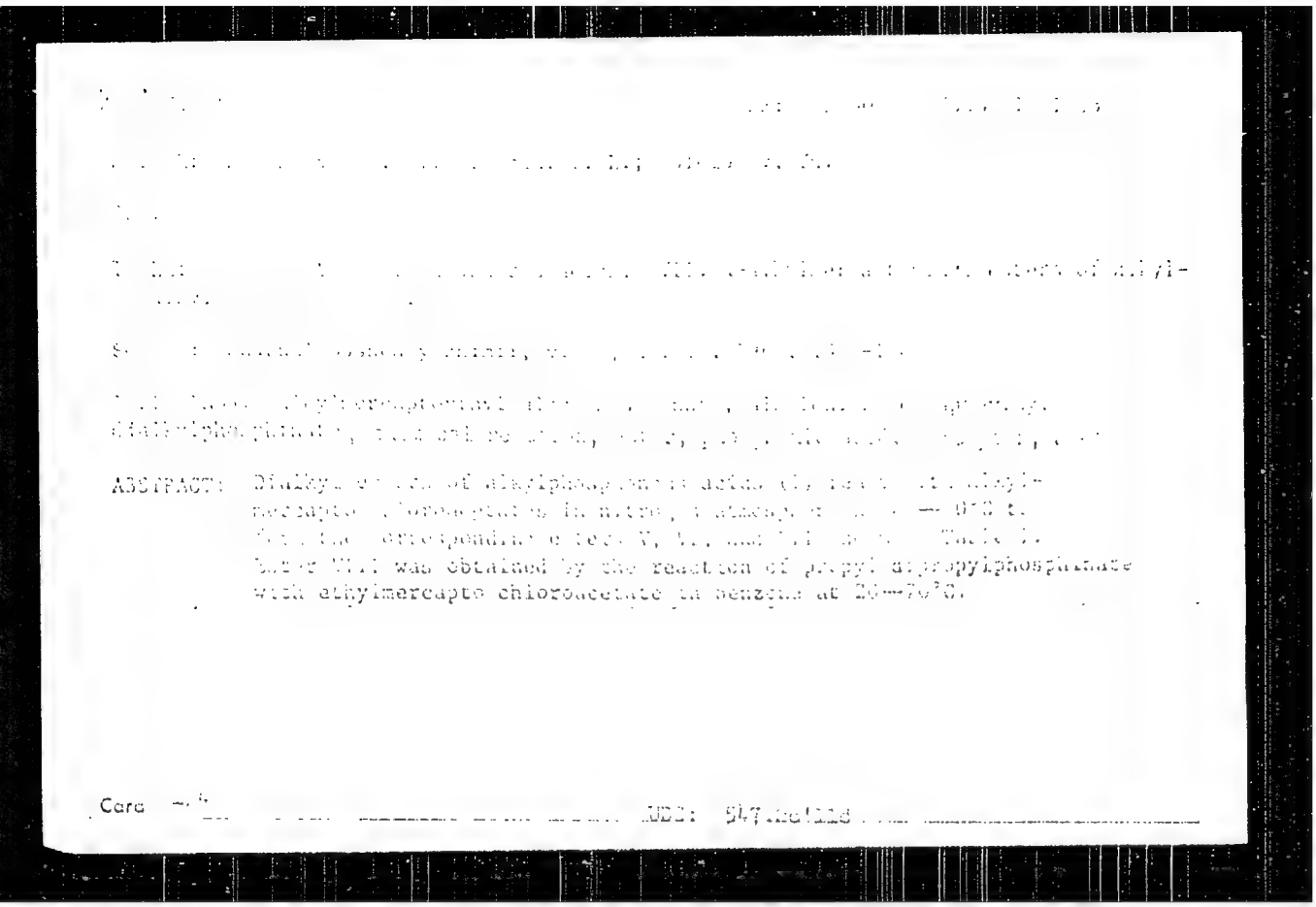
(V)

was obtained, which is the first phosphoric acid ester with three different alpha-alkenyl groups that has ever been prepared. The reaction of $POCl_3$ with acetone proceeded with greater difficulty than that with acetaldehyde; isopropenyl dichlorophosphate $CH_2=CO(Me)-POCl_2$ (VI) formed with a small yield. The new compounds that have been synthesized had the following boiling points: I, 36-40°/30 mm; III, 60-66°/1.0 mm; IV, 57-61°/2.0 mm; V, 96-102°/ 10^{-3} mm; VI, 69-70°/30 mm. Orig. art. has: 3 formulas and 1 table. [JPRS]

SUB CODE: 07 / SUBM DATE: 16Jul64 / ORIG REF: 003

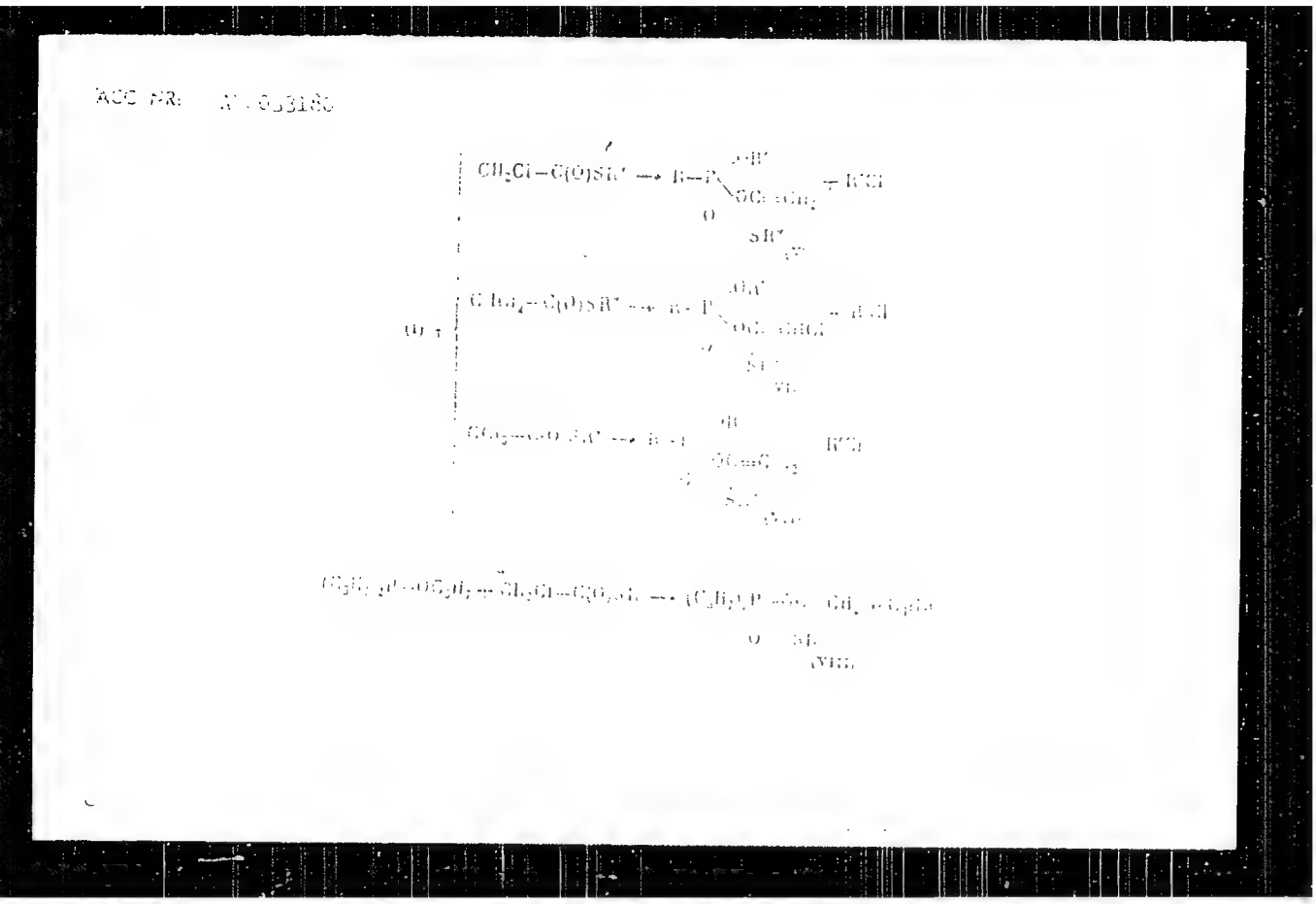
Card 2/2 CC

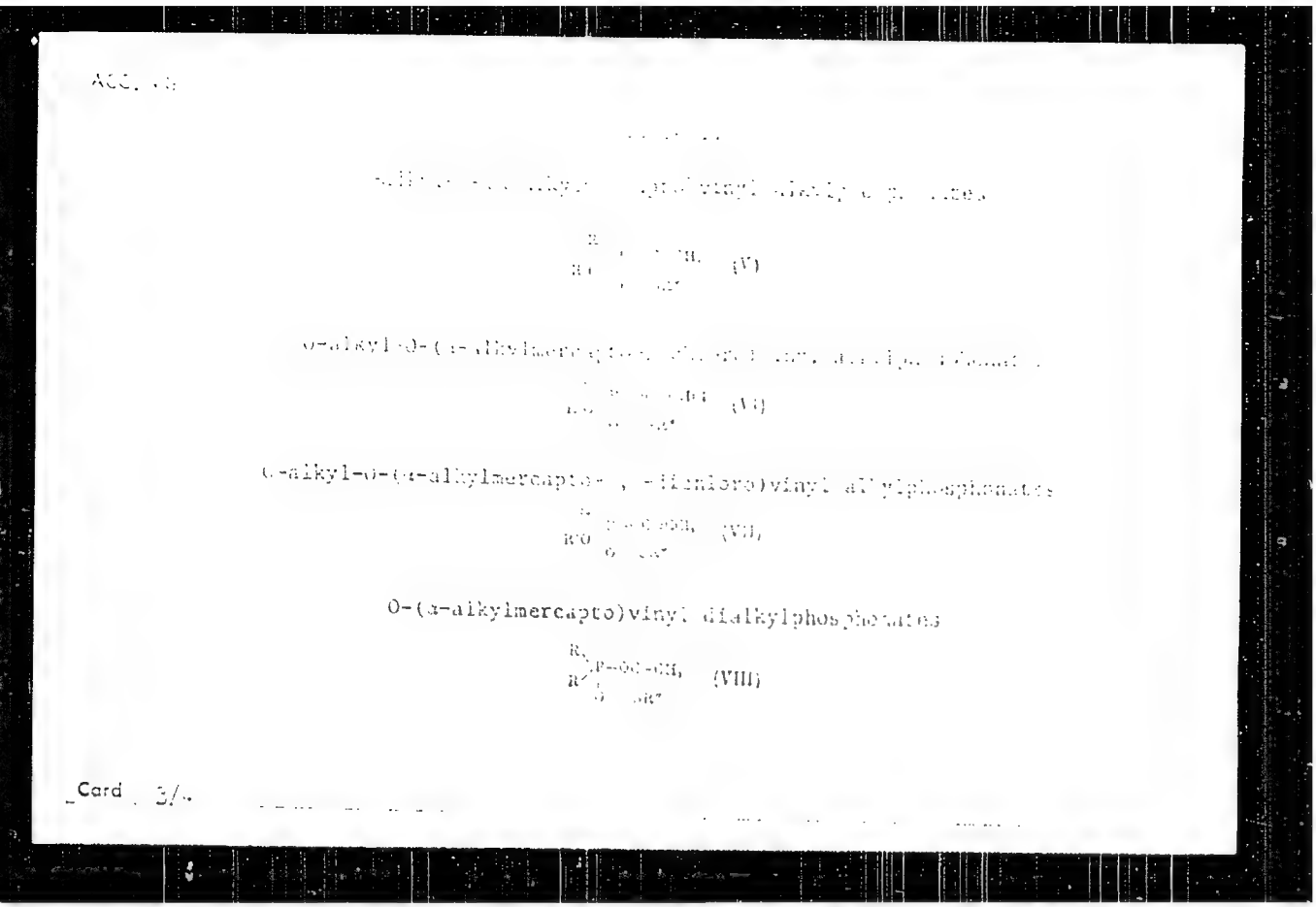




ABSTRACT: Dialkyl [illegible] of dialkylphosphorous acids (I) react with alkylmercapto chloroacetates in nitrobenzene, dialkyl [illegible] — (II) to [illegible] the corresponding ester V, bp, and [illegible]. Thus I, bp 82°, was obtained by the reaction of propyl dipropylphosphinate with ethylmercapto chloroacetate in benzene at 20—70°C.

Card [illegible] UDC: 547.[illegible]





ACC. NR:

[illegible] vinyl [illegible]

(V)

O-alkyl-O-(α-alkylmercapto- [illegible])vinyl [illegible]

(VI)

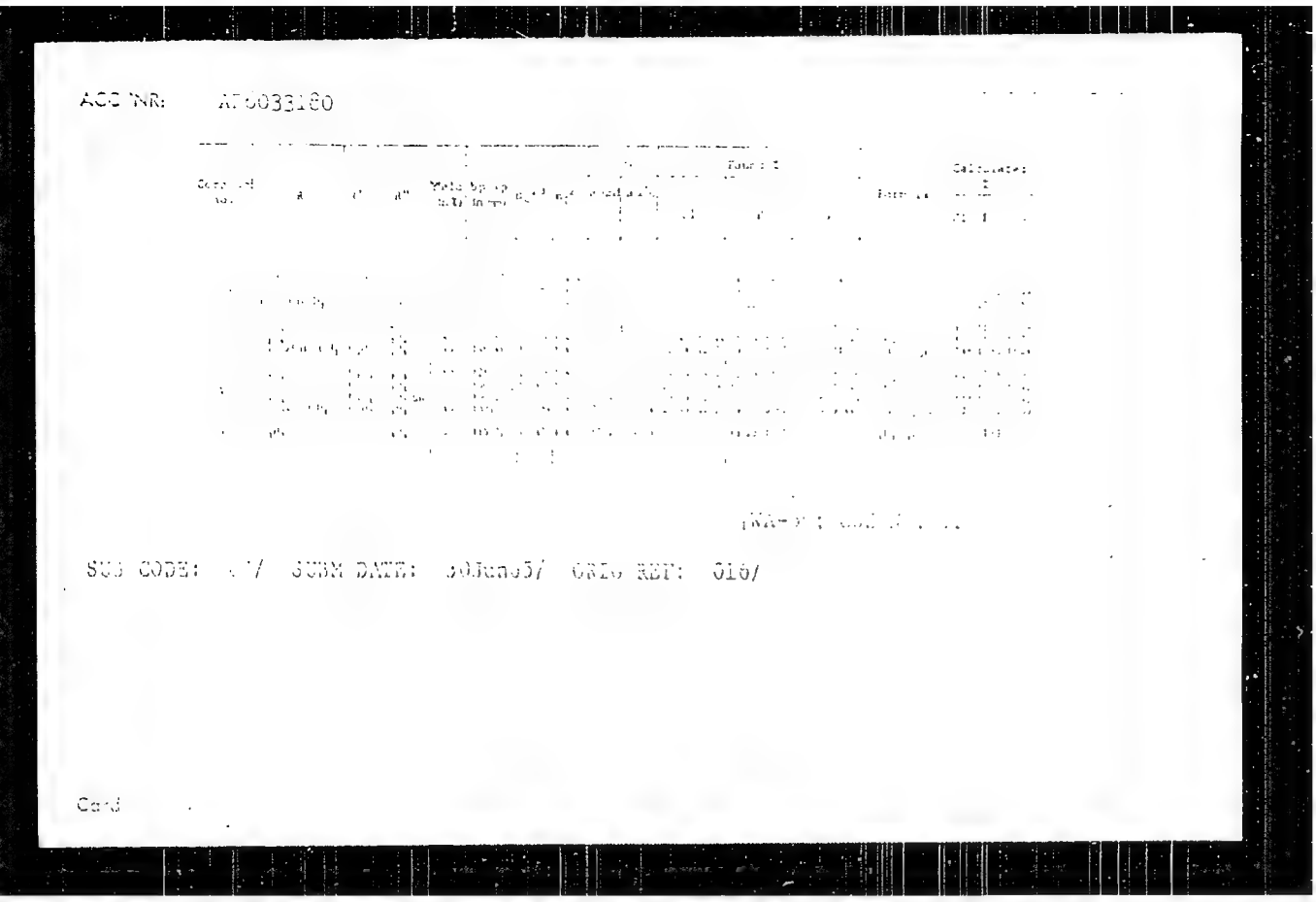
O-alkyl-O-(α-alkylmercapto- , -fluoro)vinyl alkylphosphonates

(VII)

O-(α-alkylmercapto)vinyl dialkylphosphonates

(VIII)

Card 3/4



ACC NR: AP6033180

SUB CODE: 07/ SUBM DATE: 30Jun66/ ORIG REF: 016/

Card

ACC NR: AP6030557 SOURCE CODE: UR/0413/66/000/016/0032/0032

INVENTOR: Martynov, I. V.; Kruglyak, Yu. L.; Gololobov, Yu. G.; Leybovskaya, G. A.

ORG: none

TITLE: Preparation of mixed esters of diethylphosphoric acid and oximes of glyoxalic acid esters. Class 12, No. 184852

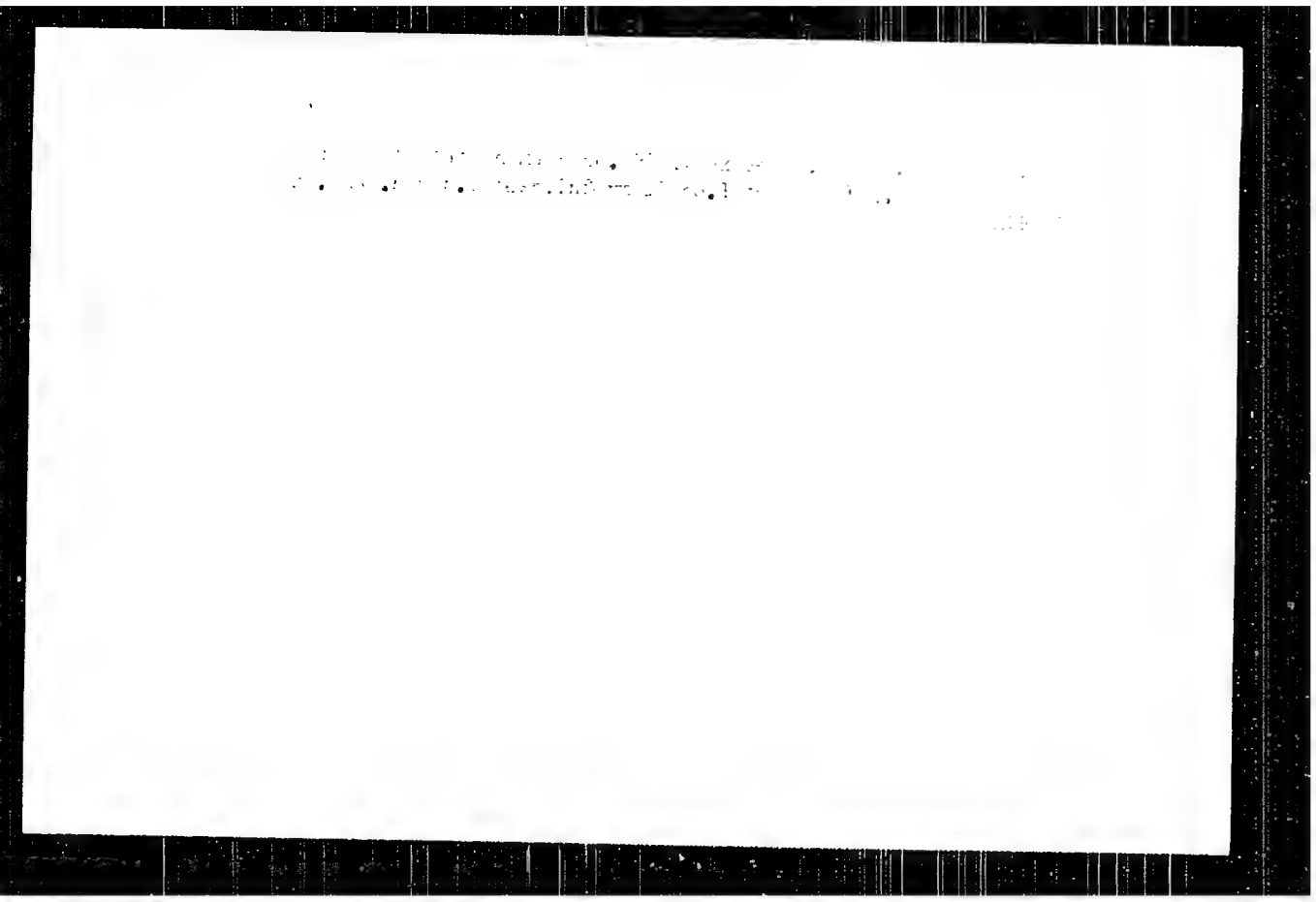
SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 16, 1966, 32

TOPIC TAGS: nitro compound, diethylphosphoric acid ester, glyoxalic acid oxime, trialkyl phosphate, phosphoric acid, organic oxime compound, acetate, calorine compound

ABSTRACT: To obtain physiologically active compounds of mixed esters of ethylphosphoric acid and oximes of glyoxalic acid esters, chloronitroacetates are treated with trialkyl phosphites with cooling, then the reaction mixture is heated to 50°. [WA-50; CBE No. 11]

SUB CODE: 07/ SUBM DATE: 26May62/

Card 1/1 UDC: 547.419.1.07



GOLOLOBOVA, M.T.

Role of the time of day in mitotic activity in mice [With summary in English]. Biul. eksp. biol. i med. 46 no.9:118-122 S '58
(MIRA 11:11)

1. Iz laboratorii gistofiziologii (zav. - kand. biol. nauk V.N. Dobrokhotov) Instituta eksperimental'noy biologii (dir. - prof. I.N. Maysky) AMN SSSR, Moskva. Predstavlena deystvitel'nym chlenom AMN SSSR N.N. Zhukovym-Verezhnikovym.

(CELL DIVISION,
daily periodicity in mice (Rus))
(PERIODICITY,
of cell division in mice (Rus))

GOLOLOBOVA, M.T.

Mitotic activity of the mouse cornea following induction of burns at various times of day. Biul. eksp. biol. i med. 47 no.3:94-97 Mr '59. (MIRA 12:7)

1. Iz laboratorii gistofiziologii (zav. - kandidat biolog. nauk V. N. Dobrokhotov) Instituta eksperimental'noy biologii (dir. - prof. I.M. Maysky) AMN SSSR, Moskva. Predstavlena deystvitel'nym chlenom AMN SSSR N. N. Zhukovym-Verezhnikovym.

(CORNEAL, physiol.
mitosis in exper. burns, daily periodicity (Rus))
(BURNS, exper.
corneal, mitosis, daily periodicity (Rus))
(PERIODICITY,
daily periodicity in mitosis in exper. corneal burns (Rus))
(CELL DIVISION
same)

GOLOLOBOVA, M.T.

Daily rhythm of cellular multiplication in the epidermis of rats during the healing of skin wounds. Biul. eksp. biol. i med. 50 no.10:118-122 O '60. (MIRA 14:5)

1. Iz laboratorii gistofiziologii (zav. - kandidat biologicheskikh nauk V.N.Doborkhotov) Instituta eksperimental'noy biologii (dir. - prof. I.M.Mayskiy) AMN SSSR, Moskva. Predstavlena deystvitel'nym chlenom AMN SSSR N.N.Zhukovym-Verezhnikovym.
(CELL DIVISION (BIOLOGY)) (WOUNDS AND INJURIES)

GOLOKOLENKO, I., polkovnik

Machinegunners. Voen. znan. 38 no.6:20 Je '62. (MIRA 15:6)
(Machine guns)

GOLOLOBOV, YU.G, FEDOTOVA, V.V.

Reaction of esters of phosphorus acid with trichloroacetyl chloride.

Khimiya i Primeneniye Fosfororganicheskikh Soyedineniy (Chemistry and application of organophosphorus compounds) A. YE. ARBUZOV, Ed. Publ. by Kazan Affil. Acad. Sci. USSR, Moscow 1962, 632 pp.

Collection of complete papers presented at the 1959 Kazan Conference on Chemistry of Organophosphorus Compounds.

GOLOLOBOVA, M.T.

Mitotic activity of the epidermis adjacent to the wound and the corneal epithelium of rats during prolonged constant illumination. Biul. eksp. biol. i med. 54 no.9:96-100 S '62. (MIRA 17:9)

1. Iz laboratorii gistofiziologii (zav.- kand. biologicheskikh nauk V.N. Dobrokhotov) Instituta eksperimental'noy biologii (dir.- prof. I.N. Mayskiy) AMN SSSR, Moskva. Predstavleno deystvitel'nym chlenom AMN SSSR N.N. Zhukovym-Verezhnikovym.

GOLOVA, Ye.A.

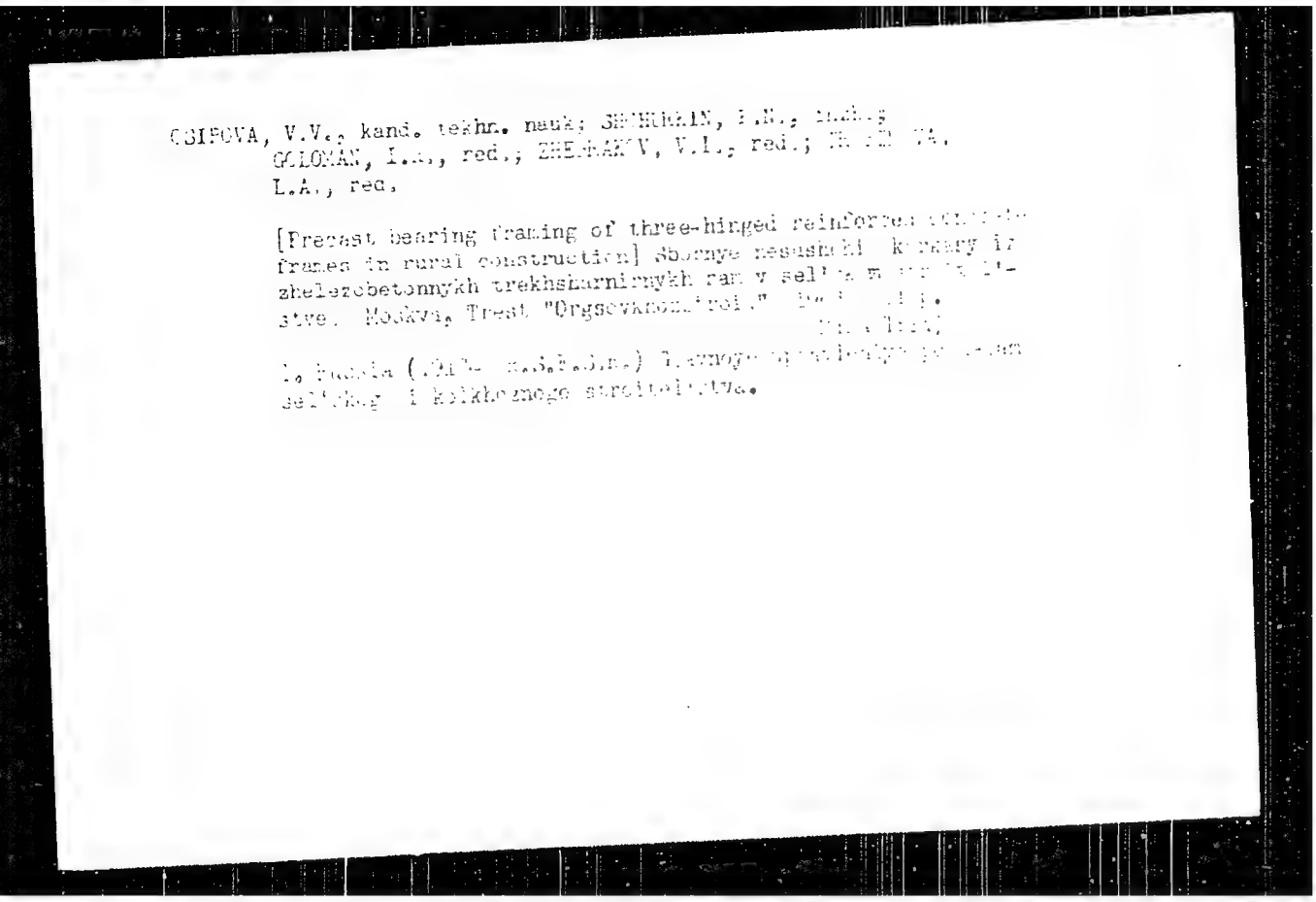
Late sequelae of granosan intoxication. Sov. zdrav. Kir. no.3:35-38 My-Je '62. (MIRA 15:5)

1. Iz kliniki propedevticheskoy terapii (zav. - dotsent M.N.Mirrakhimov) Kirgizskogo gosudarstvennogo meditsinskogo instituta.
(MERCURY COMPOUNDS--TOXICOLOGY)

MIRRAKHIMOV, M.M.; GOLOVA, Ye.A.

Distribution of rheumatism in the Kirghiz S.S.R. Sov. zdrav. Kir. no.3:42-47 My-Je '62. (MIRA 15:5)

1. Iz kliniki propedevticheskoy terapii (zav. - dotsent M.M.Mirrakhimov) Kirgizskogo gosudarstvennogo meditsinskogo instituta.
(KIRGHIZISTAN—RHEUMATIC FEVER)



OSIPOVA, V.V., kand. tekhn. nauk; SHCHUKIN, I.N., [illegible]; GOLOMAN, L.A., red.; ZHELEZNOV, V.I., red.; [illegible] L.A., red.

[Precast bearing framing of three-hinged reinforced concrete frames in rural construction] Sbornye nesushchie konstruktsii iz zhelezobetonnykh trekhsharnirnykh ram v sel'skom [illegible] stve. Moskva, Trest "Orgsel'stroymontazh," [illegible].

1. Russia (1923- R.S.F.S.R.) Tsentral'noye upravleniye po stroitel'stvu sel'skogo i kolkhoznogo stroitel'stva.

BURTSEV, L.I.; BUD'KO, A.V.; GOLOMAIZIN, A.I.; RUSANOV, K.S.

Mining systems with ore delivery by blasting. Gor.zhur. no.6: 59-60 Je '56. (MLRA 9:8)
(Kazakhstan--Mining engineering)

SYROVATKIN, A.; SHERMAN, A.; GOLOMAN, S., red.; MUKHANOV, P., red.

[Work practices of the "Saratovtselinstroi" Trust in the industrialization of rural construction] Opyt raboty tresta "Saratovtselinstroi" po industrializatsii sel'skogo stroitel'stva. Moskva, Trest "Orgsovkhozstroi", 1963. 14 p. (MIRA 17:4)

1. Russia (1917- R.S.F.S.R.) Glavnoye upravleniye po delam sel'skogo i kolkhoznogo stroitel'stva. 2. Nachal'nik otdela tresta "Orgsovkhozstroy" (for Syrovatkin). 3. Glavnyy tekhnolog tresta "Saratovtselinstroy" (for Sherman).

NEYMARK, I.I. (Barnaul); SHVIND, G.N. (Chelyabinsk); ZHUK, Ye.A.; KONOVALOV, Ye.D. (Novosibirsk); SAVEL'YEV, V.I.; LYADOV, Yu.S. (Yaroslavl'); KARAPETYAN, E.T. (Yerevan); FISHER, E.F. (Tomsk); TSINTSADZE, A.N. (Tbilisi); GOLOMAZOV, M.F. (Ternopol'); ELOZO, V.P. (Krasnodar); FEOFILOV, G.L. ; MUKHIN, Ye.P. (Novosibirsk)

Abstracts. Grud. khir. 6 no.2:113-119 Mr-Ap '64. (MIRA 18:4)

BELOTSERKOVSKIY, O. M.; GOLUBKIN, M. K.; [illegible], V. A.; IVANOV, V. P. (Moscow)

"Supersonic gas flow around blunt bodies"

report presented at the 2nd All-Union Congress on Theoretical and Applied Mechanics, Moscow, 29 Jan - 5 Feb 1964.

ACCESSION NR: AP4024563 S/0208/64/004/002/0306/0316

AUTHORS: Belotserkovskiy, O. M. (Moscow); Golomazov, M. M. (Moscow); Shulishnina, N. P. (Moscow)

TITLE: Solution of equilibrium dissociating gas flow over blunt body with detached shock

SOURCE: Zhurnal vy*chislitel'noy matematiki i matematicheskoy fiziki, v. 4, no. 2, 1964, 306-316

TOPIC TAGS: equilibrium gas, blast body, thermodynamic equilibrium, shock wave, equation of state, equilibrium constant

ABSTRACT: The symmetric flow of an ideal dissociated equilibrium gas over a blunt body has been investigated. Thermodynamic equilibrium is assumed to hold for characteristic flow times much larger than gas relaxation times. The direct method is used with approximations taken normal to the shock wave. The continuity and stream function equations are written in curvilinear body-fixed coordinates to which are added the equation of state and the energy equation for a non-heat conducting gas. A system of 2N independent integral relationships is obtained by dividing the space between the body and the shock wave into N-1 intermediate lines,

Card 1/2

ACCESSION NR: AP4024563

thus $$n = n_1(s) = \frac{N+1+1}{N}\varepsilon(s), \qquad i = 2,3 \ldots N,$$

and integrating the continuity equations along lines s = constant. The resulting equations are shown to be applicable to any arbitrary body contour. The equilibrium constants are approximated by

$$\ln Kp_i = \mathcal{A}\ln T + \frac{\mathcal{B}}{T} + \mathcal{C},$$

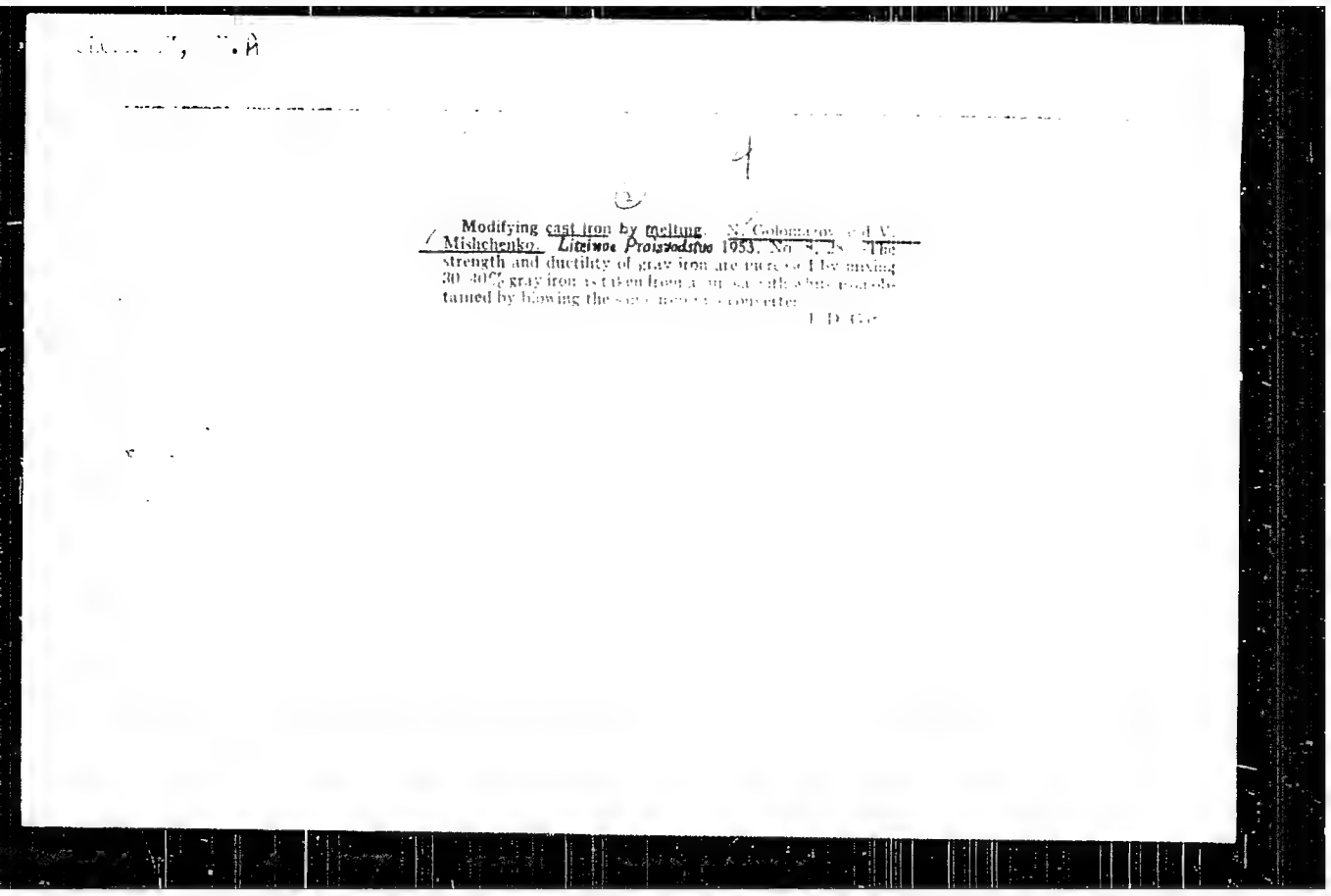
and the solution is given up to a second order approximation on a digital computer BESM-2, using standard programming techniques of flow around blunt bodies. Numerical results for a sphere and ellipse are given at Mach 6, $\gamma = 1.4$, and T = 300K, and for various free stream static pressures. Orig. art. has: 50 equations and 12 figures.

ASSOCIATION: none

SUBMITTED: 15Aug63 DATE ACQ: 16Apr64 ENCL: 00

SUB CODE: AS NO REF SOV: 006 OTHER: 000

Card 2/2



Modifying cast iron by melting. N. Golomazov and V. Mishchenko. *Liteinoe Proizvodstvo* 1953, No. 3, 28. The strength and ductility of gray iron are increased by mixing 30–40% gray iron scrap with white iron obtained by blowing the [illegible] converter.

I. D. Gr.

GOLOMAZOV N. A.

Book, Collection of Articles, Kosgiz, Sverdlovsk, 1957, 235 pp

Shaped Casting of Copper (Cont.) 509

The Vladimirskiy Tractor Plant is reported to be using a casting method with a slag-catching arrangement to eliminate slag inclusions in bronze castings. The arrangement consists of a series of retaining chambers in the gating system, where the slag is allowed to accumulate. This arrangement slows down the metal flow, thus facilitating separation of slag from the molten metal. It is reported that this method was introduced in 1945 for casting of bushings and has helped to reduce defects due to slag inclusions from 3.5 to 0.4 per cent. No personalities are mentioned. There are 2 references, both Soviet.

This book contains papers presented during a technical and scientific conference held in Sverdlovsk, Dec '55, on the theory and practice of shaped casting.

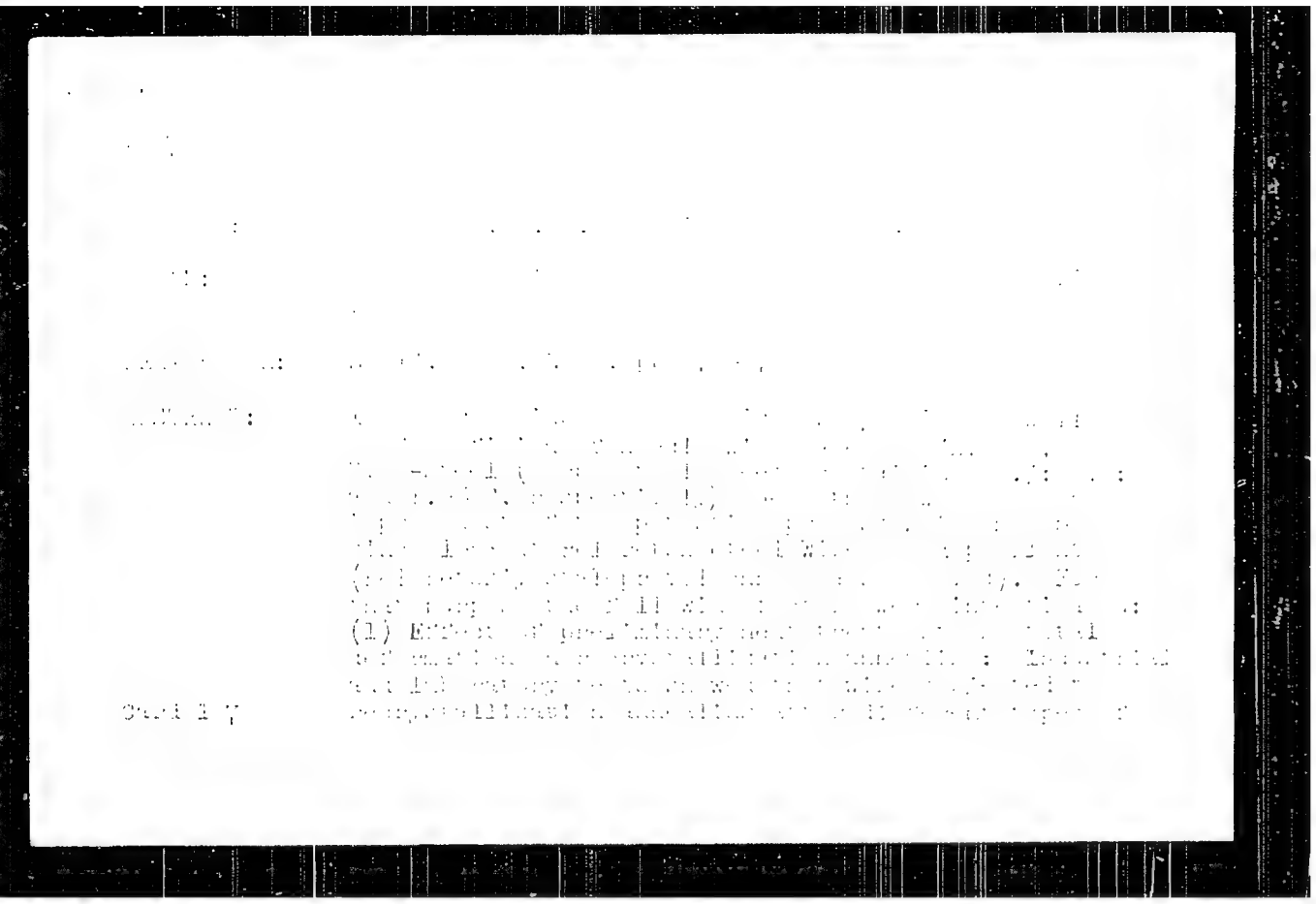
Golomazov, N. A., Engineer, Control of Scabbiness in Casting of Aluminum Bronze by Variable Rate of Metal Flow 150

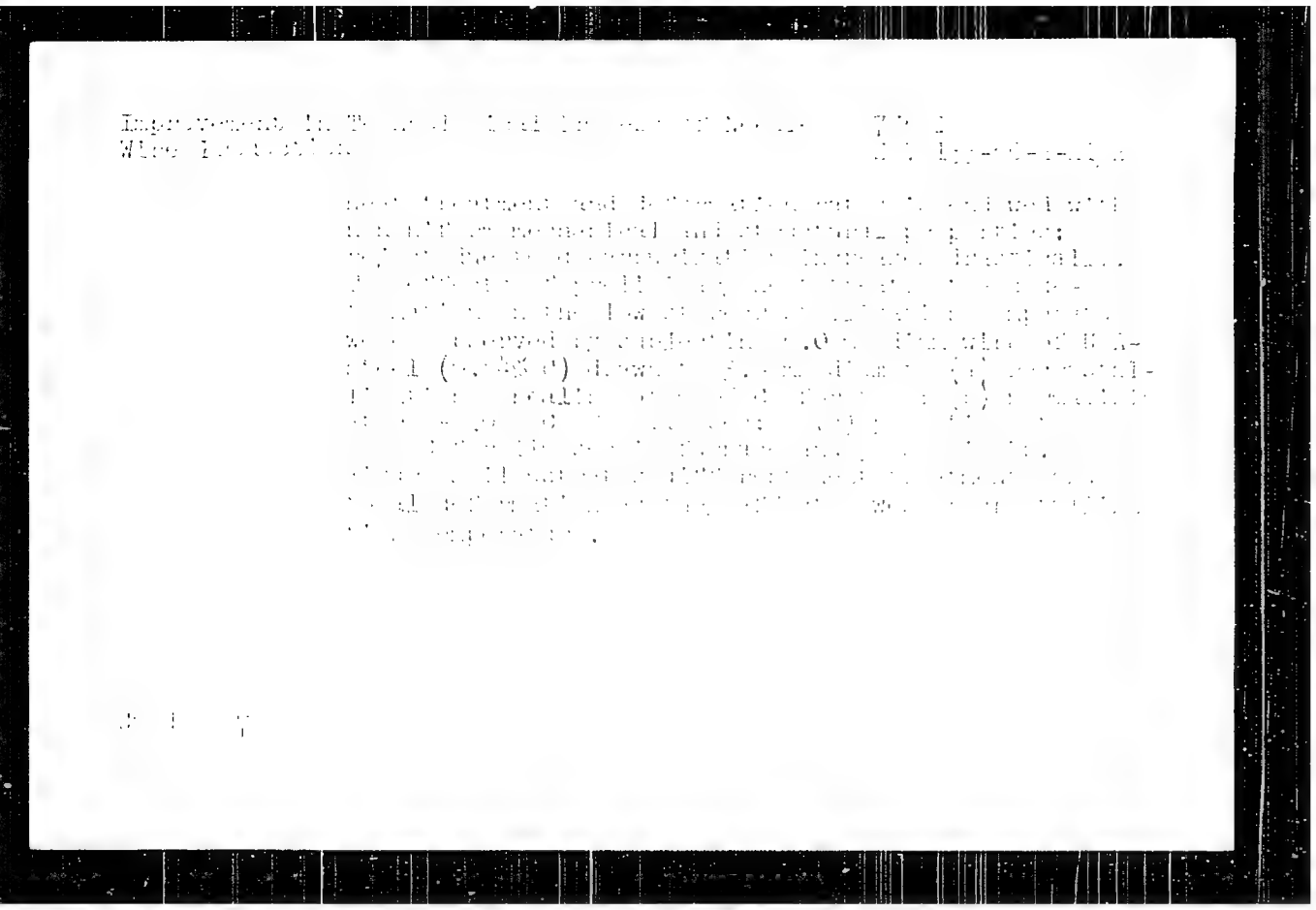
The author states that the main difficulty in casting of aluminum bronze lies in the formation of oxide film and impurities during the pouring of metal into molds. He claims that this problem has been solved by using a slag chamber to trap the impurities and by varying the rate of metal flow. Pouring of metal is said to start at a slow rate to allow the impurities to collect in the slag chamber and the rate of metal flow is then increased to insure proper filling of the mold. In conclusion the author points out that an automatic timing device to control the rate of flow would be desirable.

TRAKHIMOVICH, V.I., inzh.; BARVINSKIY, B.V.; GOLOMAZOV, N.A.

Electromagnetic stirring in 80-ton furnaces. Stal' 22 no.11:1007-1009 N '62. (MIRA 15:11)

(Steel—Electrometallurgy)





Improvement in Technological Process of Needle Wire Production

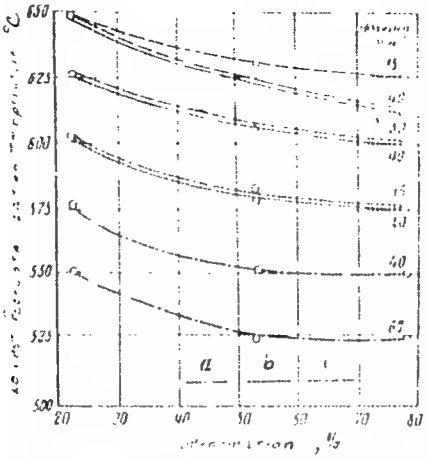


Fig. 2. Lowest recrystallization temperatures of (a) annealed; (b) patented; and (c) normalized wire after 15, 40, and 60 min heating.

Card 3/7

Improvement in Technological Process of Manufa- 77-3-1
Wire Production 357 133-3-a-21/25

The following variations were tested:

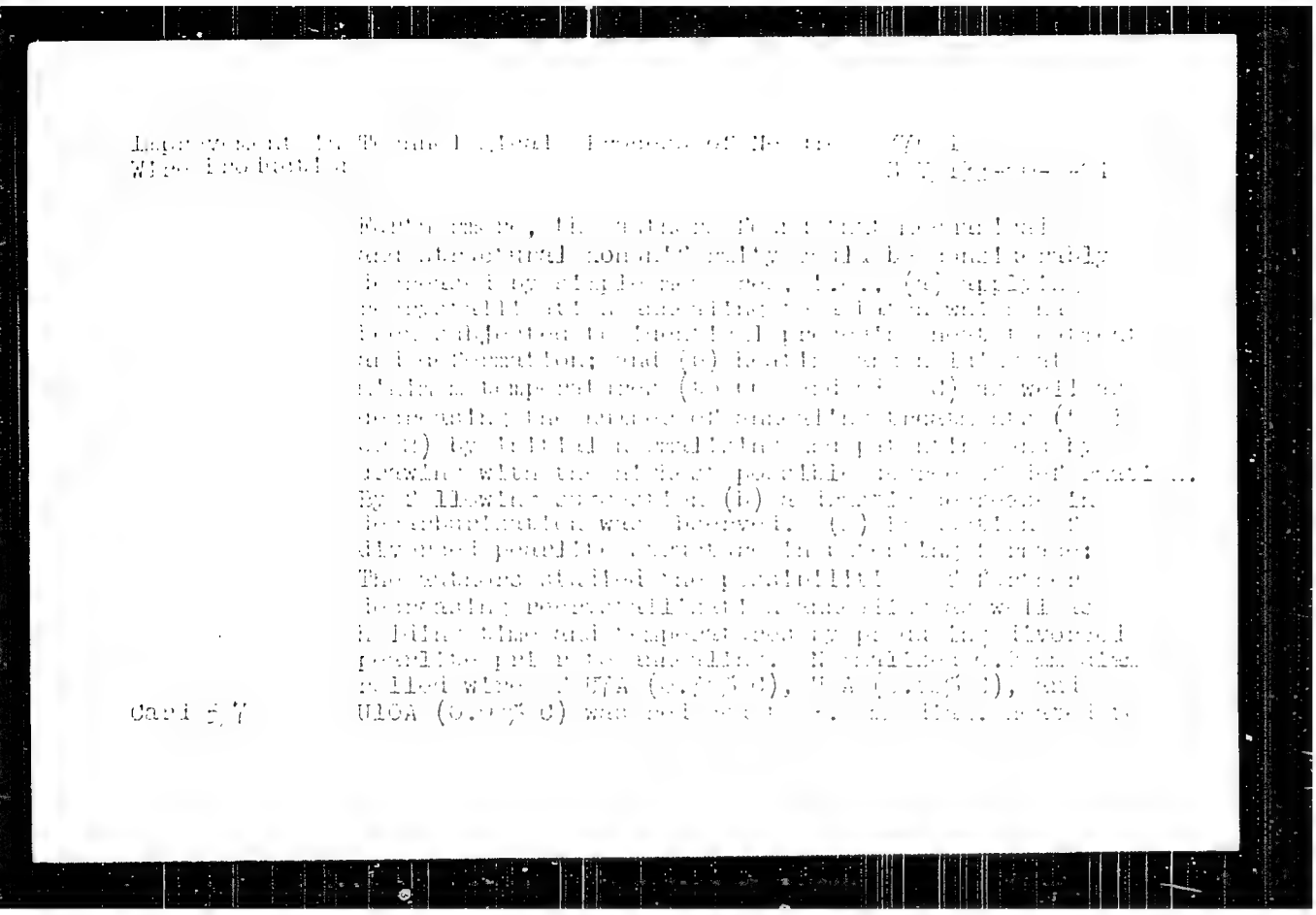
Variation	I	II	III	IV	V	VI
Rates	N + 2R;	2N + R;	P + 2R;	2P + R;	HR + 2R;	HR + N + R

VII

O + 2R

(N = Normalizing; R = recrystallization; P = patenting; HR = hot rolling; O = oxidation annealing.) Variations I and III imparted the mechanical properties of wire; variations II and IV are recommended for wire with minimum 40% deformation. Furthermore, the authors found that mechanical and structural non-uniformity could be considerably decreased by simple measures, i.e., (a) applying recrystallization annealing to a batch which has been subjected to identical preceding heat treatment and deformation;

Card 4/7



Improvement in Technological Process of Needle Wire Production

77/1
SOV [illegible]-2-21/[illegible]

[illegible], [illegible], [illegible], [illegible] and [illegible] either cooled in air or heated in isothermal environment at [illegible], [illegible], [illegible] and 700° C. Holding time varied between 7 and [illegible] sec and between [illegible] and 7 [illegible] in isothermal environment. Holding time [illegible] decisively influenced the development of crystallization centers during cooling. Industrial tests corroborated the possibility of producing divorced pearlite by air cooling or in isothermal environment which allows the temperature of recrystallization annealing to decrease by 20-30° C. (3) Decarburization was further decreased by introducing [illegible] of benzine vapors into the controlled atmosphere (PSA-[illegible]). (4) In [illegible]-type furnaces sodium acetate is recommended as a reducing agent in quantities of 50 [illegible] per ton of wire. (5) The above methods may be utilized for the improvement of other metal articles, such as ball bearing wire, beads, etc. The cooperation of N. V. [illegible] ([illegible]

Card 6/7

Improvement in Technological Process of Needle Wire Production

77-6-1
SOV/13[illegible]-21/[illegible]

Technical Sciences) and V. G. Svalov is acknowledged. There are 4 figures; 2 tables; and 7 Soviet references.

ASSOCIATION: Bobruyetsk Steel Wire and Rope Plant

Card 7/7

S/137/62/000/005/066/150
A006/A101

AUTHORS: Chekulov, N. V., Golomazov, V. A.

TITLE: The manufacture of micron-size wire by the method of [illegible] electrolytic dissolving

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 5, 1962, 35, abstract 5G255 ("Tr. Konferentsii po metizn. proiz-vu, 1959", Cholyabinsk, 1961, 140-154)

TEXT: An electrolytic method was developed for manufacturing wire of down to 5 μ in diameter from alloy X 20 H 80 (Kh20N80). A design was developed of a multi-cell electrolytic bath with contactless current connection (d-c or a-c) to the wire being processed; the inter-cell electric insulation is brought about by the aid of a narrow cylindrical channel in the dielectric. The method of electrolytical dissolving makes it possible to obtain bright wire whose homogeneity is not inferior to a wire produced by drawing. Wire of 6.0; 7.0 and 8.0 μ in diameter, made of alloy Kh20N80, by the developed method, meets the consumer's requirements. From the economical point of view the production by

Card 1/2

3/137/62/000/005/066/150
A006/A101

The manufacture of micron-size wire ...

electrolytic dissolving of a 9μ-diameter Kh2CN80 alloy wire from a 20μ-diameter blank, is equivalent to the method of drawing.

K. Ursova

[Abstracter's note: Complete translation]

Card 2/2

SOKOLOV, N.V., kand. tekhn. nauk; BURKOV, G.G., inzh.; KRASIL'NIKOV, L.A., inzh.; GOLOMAZOV, V.A., inzh.; BOBYLEVA, S.F.; LYSLOV, I.K.; Prinimali uchastiye: BREZHNEV, I.S.; SHCHETKIN, L.I.; YERMATSKAYA, A.M.; ANDRIANOVA, A.L.; SILANT'YEV, L.A.; NADEZHDINA, A.A.; LAKHMOSTOVA, F.S.; DEMENT'YEV, V.F.

Improvement of the processes of manufacturing high-strength, steel brass plated wire. Stal' 24 no.8:756-759 Ag '64. (MIRA 17:9)

1. Beloretskiy staleprovolochno-kanatnyy zavod.

GOLOMAZOVA, K.I., tekhnolog

Multistyle sectional production line at the Ufa '8 marta' Clothing Factory. Shvein. prom. no.4:30-31 Jl-Ag '59. (MIRA 13:2)

1.Fabrika im. 8 marta, Ufa.
(Ufa--Clothing industry)

L 18918-63 EWT(d)/EWP(q)/EWT(m)/EWP(k)/BDS AFFTC/ASD Pf-4
JD/HW

ACCESSION NR: AP3006603 S/0129/63/000/009/0019/0022 64 63

AUTHORS: Snitkovskiy, M. M.; Yegorov, N. V.; Golomazyuk, I. A.

TITLE: Increase in strength of R18 steel by swaging 14

SOURCE: Metallovedeniye i termicheskaya obrabotka metallov, no. 9, 1963, 19-22

TOPIC TAGS: swaging, cutting tool , R18 steel, austenite grain, carbide eutectic, metal stamping, austenization

ABSTRACT: Authors examined the effect of swaging upon the stability of cutting tools made out of R18 steel. The tools were swaged in a stamp with a conical die. After swaging, they were face-ground to a depth of 1-2 mm in order to remove the surface crust. Temperature and heating time varied. The effect of austenite grain growth and carbide eutectic upon the stability of the swaged cutting tools were examined.

Card 1/2

L 18918-63
ACCESSION NR: AP3006603

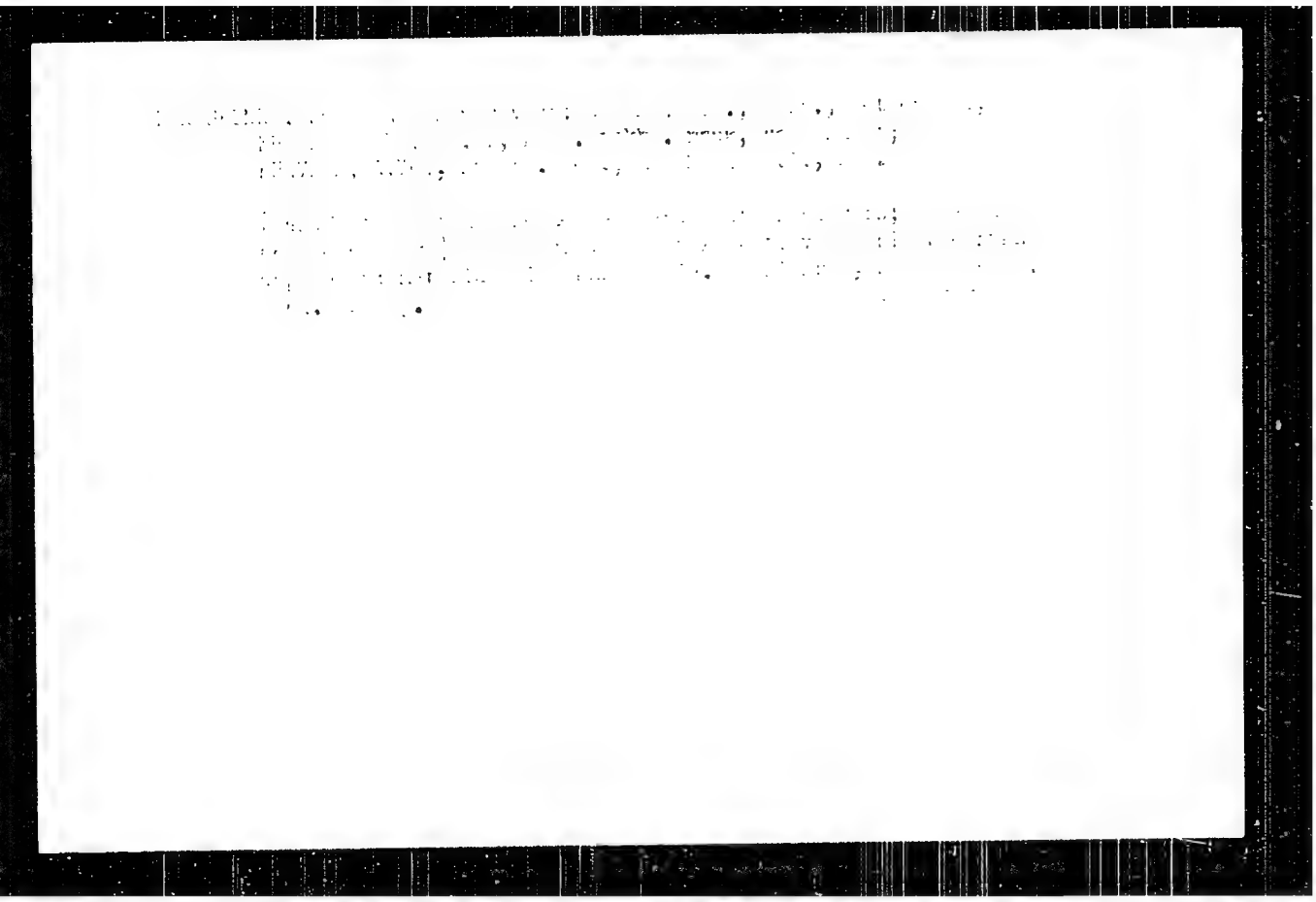
Authors found that swaging at a pressure of about 7000 kg/cm^2 increases the stability of cutting tools made out of R18 steel by 40-50%. Grain growth does not reduce the observed effect. Combining of the stamping and heat treatment operations greatly simplifies the technology of cutting tool production. This has a great practical significance in the mass production of cutting tools with complex shapes (milling cutters, drills, cutting tools, etc). The wear resistance during swaging is augmented on account of an increase in the dispersion of the submicrostructure. In contrast to austenitization, swaging brings about a volumetric change of the R18 steel's properties. Orig. art. has: 5 figures and 1 table.

ASSOCIATION: Odesskiy institut inzhenerov morskogo flota (Odessa institute of merchant marine engineers)

SUBMITTED: 00 DATE ACQ: 030ct63 ENCL: 00

SUB CODE: ML NO REF SOV: 005 OTHER: 000

Card 2/2



E(2)

AUTHOR: Golent, G. N., Deputy Chief

TITLE: Ways of Improving Financial Work in the Communications Industry (Puti uluchsheniya fin nsovy raboty v khozyaystve svyazi)

PERIODICAL: Vestnik svyazi, 1963, Nr 2, pp 17-18 (USSR)

ABSTRACT: It is stated that in 1963 the total value of communications services should be 10.5 billion rubles, an increase of 7% over 1962. 4 billion rubles should be paid into the state budget in allotments from profits. The author concentrates his attention in this article largely on ways of assuring that the income to the state from communications enterprises will be as high as possible. A radical improvement in the financial work of enterprises will result if all communications enterprises and administrations change to the cost accounting system (khozraschet). Enterprises using this system in the RSFSR, states the author, overfulfilled their receipts plan for the same period by 12.3 million rubles. Other supporting examples are cited.

Card 1/4

Ways of Improving Financial Work in the Communications Industry

Among the advantages of cost accounting are that it stimulates fulfillment of profit plans, and allows enterprises to draw on credit through the State Bank (Gosbank), which also increases the control of Gosbank over the production and financial activities of the enterprises. Several present shortcomings in the communications services, as they relate to the financial work of the industry and the level of receipts, are discussed at some length, along with measures taken or planned to combat them. These are briefly indicated here. The distribution and sale of illustrated stamped postcards and envelopes is badly in need of reorganization. This year, [illegible] million rubles (sale value) worth of same will be [illegible]. Supplementary services to the population, particularly bank are handling, should be greatly improved and expanded. Credit for this purpose is available through Gosbank for enterprises on cost accounting. Registration and payment of [illegible] is very important, the proper [illegible]

Card 1/4

greatly to receipts. The introduction of special receipts plan for [illegible] complete registration and payment of fees. Many enterprises in several republics have allowed [illegible] to pile up, with the result that they are unable to meet their budgetary obligations to the appropriate ministries and the state. Misuse of operating funds, particularly diversion of such funds into wages, is cited and criticized. The organization of the warehouses of Oblast communications ministries and administrations into material technical supply bureaus on a cost-accounting basis should radically improve the material supply situation of communications enterprises. It also will allow the bureaus to use short-term credit from Sberbank (e.g. for seasonal needs). In conclusion, the author notes that 8 provincial communications administrations in the RSFSR, 5 in the UkrSSR, and 2 in Belorussia will convert to cost-accounting during 1971, which should make for considerable improvement in the financial work of the communications organs and ministries of

Ways of Improving Financial Work in the Communications Industry

these republics

ASSOCIATION: Planovo-finansovoye upravleniye ministerstva svyazi SSR (Planning-Financial Administration of the Ministry of Communications of the USSR

Card 4/4

GOLOMB, G.E.

Use all hidden potentials for lowering communication costs and rates. Vest.svyazi 20 no.4:13-14 Ap '60. (MIRA 13:7)

1. Zamestitel' nachal'nika Planovo-finansovogo upravleniya Ministerstva svyazi SSSR.
(Communication)

GOLOMB, G.E.

New rates for communication services. Vest. sviazi 20 no. 12:21-22 D '60. (MIRA 13:12)

1. Zamestitel' nachal'nika Planovo-finansovogo upravleniya Ministerstva svyazi SSSR.
(Telecommunication--Rates)